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ORDER

OPERATION OF REGION AND CENTER AIRCRAFT

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FEDERAL AVIATION ADMINISTRATION

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FOREWORD

This order assigns administrative responsibility for the operation of aircraft that are used in Region and Center flight programs. It also provides guidelines pertaining to the use of assigned aircraft, and prescribes procedures and standards to observe when operating such aircraft.

Order 4040.9C, FAA Aircraft Management Program, delegates the authority to the Director of the Aviation Standards National Field Office, AVN-1, to issue this order and subsequent changes thereto.

ROBERT L. GOODRICH
Director, Aviation Standards
National Field Office

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CHAPTER 1. GENERAL

SECTION 1. INTRODUCTION

100. PURPOSE. This order provides guidelines regarding the operation of agency owned, leased, or rented aircraft utilized by the regions and centers in performing assigned functions.

101. DISTRIBUTION. This order is distributed to the division level in the Washington Office of Flight Operations; to the branch level in all regional offices; to the division level in the Mike Monroney Aeronautical Center and the Federal Aviation Administration Technical Center; to all Flight Standards Field Offices; to all Aircraft Certification Field Offices. Copies are also provided to the Flight Standards Branch at the FAA Academy, AAC-950; to the Operations Standards Section, AVN-131; and to the Aircraft Maintenance and Engineering Division, AVN-300. Copies are to be made available to all authorized region and center participants with pilot-in-command authority.

102. EFFECTIVE DATE. This order becomes effective December 30, 1985.

103. BACKGROUND. To improve the management of the Federal Aviation Administration Aircraft Program, the contents of Order 4040.9B, Operation of FAA Aircraft, have been revised, rewritten, and issued as separate orders: Order 4040.9C, FAA Aircraft Management Program, and this order 4040.22, Operation of Region and Center Aircraft.

Order 4040.9C establishes and describes the objectives of the FAA Aircraft Management Program; provides policy; establishes formal guidelines; and assigns responsibility for the management, operation, and maintenance of agency aircraft. (Order 4100.24A, General Maintenance, addresses the aircraft maintenance activity).

Order 4040.22, along with the region/center supplements, consolidates the aircraft operation guidelines which are applicable to region and center flight operations.

104. EXPLANATION OF CHANGES. Those parts of Order 4040.9B that were operational in nature have been retained and revised, and incorporated into this order. The following incorporations and changes were made:

a. Chapter 3 of Order 4040.9B has been incorporated as Chapter 3, "Aircraft Operations."

b. Sample completed copies of FAA Forms 4040-2, 4040-6, and 4040-7 have been included.

c. Operational guidelines for flight inspection and Headquarters Aircraft Management Staff, Hangar 6, flight activity have been omitted and are contained in separate orders providing guidelines for these activities.

d. A quarterly flight safety program at all organizations that conduct flight operations has been established.

e. A flight safety officer at each operating organization as directed by region and center directors has been implemented.

105. DEFINITIONS.

a. Agency: Synonymous with Federal Aviation Administration (FAA).

b. Agency Aircraft: Synonymous with "FAA Aircraft" and includes --

(1) Aircraft used EXCLUSIVELY in the service of the agency that are owned, rented, leased, or otherwise in possession of the agency for the purpose of flight.

(2) Open market rental aircraft during that period of time when they are in possession of the agency for the purpose of flight.

c. Agency Pilot: A person who is employed by or assigned to the agency and is authorized and qualified as prescribed in Order 4040.9C to fly aircraft.

d. AMIS: Aircraft Management Information System - used to document aircraft activity.

e. Flight Operations Activity: An element of the agency's organizational structure that has program responsibilities that require significant use of agency aircraft and that has personnel whose primary function is piloting aircraft.

f. Rental Aircraft: Civil aircraft obtained through open market or contract agreements and used within the agency rental program. (See appendix 1 for rental categories).

g. Subject Pilot: Agency or non-agency personnel who are required and approved as flight crewmembers for specific research project flights.

106. AUTHORITY TO CHANGE THIS ORDER. The Director, AVN-1, has been delegated the authority to issue this and related orders as necessary to establish standards and procedures for the management, operation, and maintenance of region- and center-assigned aircraft.

107. AUTHORITY TO PUBLISH SUPPLEMENTS. To satisfy unique mission requirements, region and center directors may publish supplements to this order for aircraft operations under their supervision. In this regard, standards for operations may be raised and additional restrictions imposed upon aircraft and crew as necessary.

Two printed copies of these supplements shall be forwarded to AVN-1 for review and retention.

108. - 119. RESERVED.

SECTION 2. ASSIGNMENT OF RESPONSIBILITIES

120. GENERAL. The assignment of responsbilities has been made by the Department of Transportation, cannot be redelegated unless specifically authorized, and are established by and are contained in FAA Order 4040.9C.

121. APPLICABILITY. The policies and guidelines established by FAA Order 4040.9C are to be used to plan, direct, and control the use and operation of all agency aircraft to obtain maximum safety, efficiency, and economy.

122. DIRECTOR, AVIATION STANDARDS NATIONAL FIELD OFFICE, AVN-1. The Director, AVN-1, in the performance of assigned duties and responsibilities:

a. Develops and issues orders, standards, and procedures governing the safe, efficient, and economical use of region and center aircraft.

b. Develops plans, performs evaluations, and makes recommendations for approval by the Administrator for the acquisition or disposal of agency aircraft assigned to regions or centers.

c. Assigns and reassigns aircraft to region and center organizational elements, as necessary, for use in the accomplishment of agency objectives.

d. Publishes additional guidelines and procedures as necessary to provide for the effective implementation and administration of the policies contained in Order 4040.9C and the guidelines contained in this order.

123. REGION AND CENTER DIRECTORS. The Region and Center Directors, in the performance of assigned duties and responsibilities:

a. Develop respective annual flight hours and aircraft program requirements.

b. Designate, in writing, those individuals authorized to participate as pilot in command, second in command, or air crewmember in their respective flight programs. This authority shall not be delegated and shall be in accordance with the standards and qualifications criteria prescribed in Order 4040.9C and related orders.

c. Submit annually, to AVN-1, their respective flight program budget requirements -- including their list of authorized flight participants, as detailed in paragraph 23b.

d. Support their flight programs as necessary by using open market or contract rental small aircraft.

e. Authorize the carriage of passengers in region/center aircraft in accordance with the policies of Order 4040.9C and the guidelines of this and related orders.

f. Manage their respective flight programs including the use of aircraft and simulators, and ensure that safe and efficient flight operations are conducted in accordance with policies and procedures of Order 4040.9C and related orders.

g. Review and revalidate their respective flight program participants on a quarterly basis. This includes adding to or removing from the program those participants who are no longer eligible because of transfers, changes in position or qualifications, resource limitations, or failure to remain current.

h. Develop and manage a region/center Flight Safety Program.

i. Designate Flight Safety Officers as necessary to conduct quarterly flight safety meetings for all assigned air crewmembers.

j. Develop and maintain supplements which describe and define additional Region/Center flight activity guidelines and procedures. These supplements shall be developed as necessary and shall apply to all units that conduct flight operations. Each supplement shall contain at least:

(1) Aircraft dispatch procedures,

(2) VFR flight-following procedures,

(3) Maintenance/airworthiness procedures including procedures for local flight and flights on itinerary,

(4) Surface wind restrictions for takeoff and landing practice,

(5) A graphic which defines the boundaries of each local flying area,

(6) Fuel procurement procedures, and

(7) Flight documentation procedures.

124. - 199. RESERVED.

CHAPTER 2. FLIGHT PROGRAM GUIDELINES

SECTION 1. CONCEPT

200. APPLICABILITY. The policies of Order 4040.9C and the guidelines and procedures of this order govern region and center flight operations and shall be observed unless exemptions are authorized. The manager of each facility or organizational element which participates in the agency flight program shall establish procedures to assure that each flight crewmember is appropriately qualified and has read and understands the provisions of this order before serving as an operating crewmember on an agency aircraft. Nothing shall be construed as relieving the pilot in command of his/her basic responsibility for exercising sound and prudent judgment in all aspects of flight.

201. REQUESTING FLIGHT HOURS.

a. Annual flight-hour requirements for logistics, training, and research and development shall be developed, justified, and submitted in accordance with Order 1800.12D, Flight Standards Program Guidelines, and the Call for Estimates.

b. Annual flight-hour requirements for evaluation, currency, and transportation shall be developed, justified, and submitted by each region and center.

c. Flight programs shall be developed and flight hours allocated so that each designated pilot in command may meet the mandatory currency requirements specified in Order 4040.9C, chapter 5.

202. - 219. RESERVED.

SECTION 2. ADMINISTRATION AND USE OF AIRCRAFT

220. PRIOR APPROVAL OF AIRCRAFT AND SIMULATOR USE. Each proposed flight in an agency aircraft, or flight time in a simulator, and each passenger to be carried in an agency aircraft must be documented on FAA Form 4040-6, FAA Aircraft Request and Use Record, and must have PRIOR administrative review and approval. Officials may grant approval only after verifying that passengers are in the categories authorized in paragraph 242 of Order 4040.9C, and after verification of flight crewmembers' (1) authorization to participate in the agency flight program, (2) possession of current and proper level of airman and medical certificates, and (3) recent flight currency as prescribed in Order 4040.9C, chapter 5.

a. Full-Time Aircraft Operating Elements. These elements shall publish a flight schedule (signed by an individual having written delegated approval authority from the official having jurisdiction over allocated flight hours) listing the aircraft, pilot in command, assigned crewmembers, functions/purposes of flight, planned itinerary, and other appropriate details for those flights they actually control. Names of passengers will be either listed on the schedule or attached to it. In all cases, passengers will be approved in writing prior to flight by the official having jurisdiction over allocated flight hours or an individual to whom this authority has been delegated, except as provided for in paragraph 271. Where numerous changes are required, a log of changes to the published schedule will meet this requirement. Other elements utilizing aircraft assigned to full-time aircraft operating elements shall be governed by paragraph 220b.

b. Other Organizations Utilizing Allocated Flight Hours. Organizations with allocated flight hours, but without sole use of agency aircraft, shall utilize FAA Form 4040-6 for request and approval. A sample is provided in appendix 1, Figures 4, 5, and 6. Approval will be signed only by the official having jurisdiction over allocated flight hours or one to whom this authority has been delegated in writing.

c. Simulator Hours. Organizations other than the FAA Academy utilizing an approved flight simulator will process the request and approval in accordance with the instructions contained in paragraph 220a or 220b, as appropriate. Simulator hours credited toward meeting the currency requirements of Order 4040.9C, chapter 5, will be logged as pilot time on FAA Form 4040-6, which will be processed using the instructions contained in appendix 1 pertaining to rental aircraft.

221. RECORD RETENTION. In accordance with Order 4040.9C, the office having jurisdiction over allocated flight hours shall maintain copies of FAA Form 4040-6, and any supplemental passenger manifest for a period of 3 years for post-audit and review, then destroy.

222. USE OF AIRCRAFT FOR PURPOSES OTHER THAN THOSE FOR WHICH THEY ARE NORMALLY ASSIGNED.

a. Agency missions occasionally require aircraft assigned to one activity be utilized temporarily by another activity in support of special projects. An activity requiring use of aircraft under such circumstances must submit a written request to the Director, AVN-1, containing:

(1) Background or summary of the project or requirement.

(2) Type of aircraft required (in order of preferences if several types will meet the requirements).

(3) Flight hours and inclusive dates.

(4) Locale where aircraft is required.

(5) Description of special equipment installations which will be required.

(6) Designation by name of the individual in charge of the special project or mission.

b. The Director, AVN-1, will advise the requestor of final disposition of the request including assignment of special crews and designation of pilot in command as may be required.

223. LOGISTICS FLIGHTS. To ensure accurate accounting data, flights reported as conducted solely for logistical purposes are to be conducted only by organizations with an approved program specifically containing logistics flight hours. This does not preclude carrying cargo on a space available basis on a flight conducted for a purpose other than logistics, as long as no significant costs to the agency are incurred.

224. TEST FLIGHTS. Test flights shall be conducted whenever required by Order 4100.24A, chapter 4, or whenever the appropriate manager or the manager of the maintenance facility to which the aircraft is assigned deems it prudent.

a. A test flight is defined as a flight to determine satisfactory performance or airworthiness following certain repairs, installations, alterations, or modifications, and before an aircraft is returned to service.

b. The following limitations apply to test flights conducted to determine the airworthiness of aircraft:

(1) Daylight VFR conditions shall exist.

(2) No passenger will be carried.

(3) The crewmembers authorized are those persons, including technical personnel, required to operate the aircraft and to evaluate the equipment or system requiring the test. These limitations DO NOT APPLY when the flight is conducted to evaluate performance of aircraft systems or components which DO NOT affect the airworthiness of the aircraft.

c. Once the test flight mission has been completed, subject to the limitations in paragraph 224b, an aircraft may be used on another mission, provided additional ground inspection is not required before returning it to service.

225. FERRY FLIGHTS AND SPECIAL FLIGHT AUTHORIZATION.

a. A ferry flight is a flight made solely for:

(1) Moving an aircraft for maintenance or modification or returning the aircraft to its assigned operational location after maintenance or modification, or

(2) Initial operational assignment or operational reassignment between agency organizational elements.

b. Special Flight Authorization. AC Form 4100-234, Special Flight Authorization, is required for ferry flights when:

(1) The aircraft fails to meet applicable airworthiness requirements but is capable of safe flight.

(2) Limitations of the minimum equipment list have been exceeded.

(3) There is noncompliance with an Airworthiness Directive, only if such flight authorization is provided within the contents of the Airworthiness Directive.

NOTE: A special flight authorization does not supersede a ferry flight limitation specified in an Airworthiness Directive.

(4) Certificated gross weight is exceeded by additional fuel, fuel carrying facilities, or navigational equipment to meet specific flight range requirements.

c. The Special Flight Authorization must include:

(1) The purpose of the flight.

(2) The planned itinerary.

(3) The crew assigned to operate the aircraft and its equipment (e.g., pilot, copilot, technician, flight engineer, etc.).

(4) The ways in which the aircraft does not comply with applicable airworthiness requirements.

(5) Any restrictions considered necessary for safe operation of the aircraft.

(6) A statement as to the limitations, if any, on carrying additional crewmembers or passengers.

(7) The organization which will exercise operational control of the flight.

(8) The signature of the releasing official.

d. Logbook Entry Associated with the Special Flight Authorization. When an aircraft fails to meet applicable airworthiness standards, an entry will be made in the aircraft logbook by appropriately certificated maintenance personnel stating the way(s) in which the aircraft does not comply with airworthiness standards. This entry will also show that necessary inspections have been completed and the aircraft is safe for flight. Signature and certificate number of the individual making the entry will be verified by the pilot in command.

(1) When certificated maintenance personnel are not available at the aircraft site, the pilot in command may discuss the conditions with the facility manager to whom the aircraft is assigned. The manager will in turn involve his/her appropriately certificated maintenance personnel in the discussions, and if all parties agree that an on-the-site mechanic's inspection is not required, the special flight permit may be issued by message or by telephone by the facility manager, stipulating wording for logbook entry, which must include the mechanic's name and certificate number.

NOTE: If authorization is by telephone, it must be confirmed in writing by the facility manager and contain the concurrence signature and certificate number of the mechanic. A copy of such authorization will be retained as a part of the official aircraft records.

(2) The pilot in command has the final authority to delay or cancel any flight when such action is considered necessary.

e. Responsibilities for Ferry Flights. The manager of the organization to which the aircraft is assigned at the origin of the flight will assign the ferry crew, release the aircraft, and maintain operational control of the aircraft to its ferry destination.

(1) In some instances, AVN-300 furnishes crews for ferry of aircraft to a maintenance base for maintenance or modification. In these instances, the organization to which the aircraft is assigned for operations is responsible for release of the aircraft for ferry flight, assisting the crew with any special flight arrangements, and assuring that the flightcrew is adequately briefed and is provided with necessary charts, maps, clearances, and any other material required for safe and efficient conduct of the flight. The Manager of AVN-300 will exercise en route operational control when the ferry crew is provided by AVN-300.

(2) The Director, AVN-1, will provide special instructions for ferry flights not covered by instructions listed in paragraph 225e(1).

f. Ferry flights. Approval in advance must be obtained from the manager of the organization to which the aircraft is assigned. The approval authorities for these organizations are as follows:

(1) Aeronautical Center (AAC) - Manager, Flight Standards Branch, FAA Academy.

(2) FAA Technical Center (ACT) - Manager, Aviation Facilities Division.

(3) Regions - Manager, Flight Standards Division.

(4) Aviation Standards National Field Office - Manager, Aircraft Maintenance and Engineering Division.

g. Prior to requesting management approval for a ferry flight, operations and maintenance personnel must have taken into account at least the following:

(1) The technical data prescribed by the aircraft flight manual, operations manual, or other operating limitations to which the aircraft must conform.

(2) Operational equipment necessary for safe operation of the aircraft.

(3) Aircraft weight limits.

(4) Fuel and fuel distribution limits.

(5) Center-of-gravity limits.

(6) Maneuvers to which the aircraft is limited.

(7) Limit on use of flight equipment, such as autopilot.

(8) Meteorological conditions to be avoided.

(9) Airspeed/Mach limits.

(10) Weather minimums appropriate to the aircraft operating limitation.

(11) Route to be flown.

(12) Flightcrew qualifications.

h. Aircraft involved in an accident or incident may not be ferried prior to release from the FAA accident coordinator.

i. A transfer of operational control must be confirmed in writing. The responsibility for operational control of an aircraft includes responsibility for the safety and utility of the mission.

j. Provisions for conveying the authorization to ferry an aircraft to the pilot in command under a special flight authorization may be accomplished by telegram or other written means, but not verbally unless confirmed in writing. Authorization will specify the organization having operational control.

226. REIMBURSABLE/REFUND FLIGHTS. The operation and maintenance of agency aircraft is normally funded under the Operations Appropriation. When a flight is conducted for a purpose (Logistics, etc.) which serves another appropriation, the recipient appropriation shall reimburse the Operations Appropriation in accordance with current directives. Whenever a flight serves more than one appropriation, the reimbursement shall be prorated between appropriations on an equitable basis. This does not preclude the incidental benefits to another appropriation involving an Operations funded flight, as long as no additional costs to the Operations Appropriation are incurred.

227. DEVIATION FROM AUTHORIZED ROUTES. Under no circumstances will any deviation of flight be authorized for the convenience of any passenger or crewmember except for emergency purposes.

228. - 229. RESERVED.

SECTION 3. ADHERENCE TO REGULATIONS

230. AIRSPACE AND AIR TRAFFIC. The agency must comply with regulations prescribed under the authority of Sections 307(a), Use of Airspace; 307(c), Air Traffic Rules; and 501, Registration of Aircraft Nationality, of the Federal Aviation Act of 1958 as a matter of law.

231. CERTIFICATION - PILOTS AND FLIGHT INSTRUCTORS. Personnel operating agency aircraft will be appropriately certificated in accordance with Federal Aviation Regulations (FAR) Part 61.

232. AIRWORTHINESS CERTIFICATION.

a. Agency airplanes shall be certificated in accordance with FAR Part 21, Subpart II, except for those aircraft authorized by AVN-1 to be operated temporarily or indefinitely as noncertificated aircraft. Agency helicopters shall be certificated in accordance with FAR Part 27 or 29, depending upon the helicopter involved. Certificated aircraft shall display an appropriate certificate. Noncertificated aircraft shall display a public document as provided in Order 4100.24A in lieu of an airworthiness certificate.

b. Requests to operate in the noncertificated category will be processed through AVN-1.

c. Special flight permit provisions of FAR Part 21 apply to agency aircraft operated as certificated aircraft. In keeping with the continuous airworthiness program approved for agency aircraft, continuing authorization described in FAR Part 21 is authorized for aircraft operations.

233. AIRCRAFT OPERATIONS. Agency aircraft will be operated in compliance with the requirements of FAR Part 91, Subpart A - General; Subpart B - Flight Rules; and Appendix A - Category II Operations (if applicable); Order 4040.9C, and this order.

234. EXCEPTIONS.

a. Exceptions to the aircraft flight manual requirements of FAR Section 91.31(b) are permitted when an agency developed operations manual is provided. This operations manual shall contain all agency approved aircraft flight manual operating limitations and performance information prescribed for that aircraft. Operating procedures shall provide a level of safety at least equivalent to that set forth in the aircraft flight manual.

b. Exceptions to the equipment requirements in FAR Section 91.33 are permitted when a minimum equipment list is provided in the flight manual of specific type aircraft.

c. Regulatory requirements pertaining to the carrying of passengers for hire or to air carrier operations are not entirely appropriate to agency operations and do not apply except as indicated in specific orders.

d. The FAA Technical Center (ACT) is authorized deviation from FAR Sections 91.70(a), 91.71(d), 91.79(c), and 91.109(a) by Exemption No. 1200.

235. APPROVAL AUTHORITY. Aircraft maintenance, certification, and operating requirements which must have specific approval authority will be approved as follows:

a. Operation of noncertificated aircraft must be approved by AVN-1.

b. A special flight permit, with continuing authorization, is approved for aircraft operations. Associated aircraft ferry flight procedures will be as described in paragraph 225 of this order and in Order 4100.24A.

236. - 239. RESERVED.

SECTION 4. CHANGES OR MODIFICATIONS TO AIRCRAFT

240. GENERAL. Proposed changes or modifications to agency aircraft and associated equipment (excluding changes and/or modifications required for the accomplishment of specific research and development projects) are to be processed pursuant to Order 4100.24A.

241. - 249. RESERVED.

SECTION 5. FLIGHT PROGRAM PARTICIPATION

250. PARTICIPATION CRITERIA. Individuals will be designated to participate in the flight program under one of criteria listed in Order 4040.9C, paragraph 210.

251. DESIGNATION OF FLIGHTCREW POSITIONS. The number of pilots designated shall be limited by the programmed flight hours to those that may reasonably maintain currency within the allocated flight hours (refer to Order 4040.9C, paragraph 211, for guidelines).

252. - 259. RESERVED.

SECTION 6. SPECIAL PROJECT FLIGHT ACTIVITY

260. SUBJECT PILOTS. Special projects sometimes require the use of subject pilots for in-flight evaluation purposes. Those serving in this capacity are expected to demonstrate to the pilot in command that they have an acceptable level of familiarity with the aircraft concerned prior to being allowed to participate in the critical aspects of a project flight. Critical aspects include but are not limited to takeoffs and landings.

261. NON-AGENCY OBSERVERS. The proper accomplishment of certain agency projects, on occasion, requires official observers who are not agency employees to occupy a flight crewmember position during flight operations. Those involved with such operations shall ensure that:

a. The observer shall possess a current FAA, military, or foreign government pilot certificate if occupying a flight control position.

b. If actual control of the aircraft is intended, the observer shall possess a current FAA, military, or foreign government medical certificate.

c. The pilot in command shall make the final determination of the crew position to be filled by the observer and the extent of his/her involvement.

d. When required by the aircraft flight manual for normal flight operations, a second in command meeting the requirements of Order 4040.9C, paragraph 504, must be assigned to the crew.

262. - 269. RESERVED.

SECTION 7. PASSENGERS AND CARGO

270. GENERAL.

a. Passengers and/or cargo may be aboard agency aircraft in the conduct of official business when:

(1) The carrying of such passengers/cargo will not result in additional cost to the government, and

(2) Advance authorization has been granted by the agency official having dispatch authority for the flight involved.

b. In all cases, passengers must be approved, in writing, prior to flight by the official having jurisdiction over allocated flight hours or an individual to whom this authority has been delegated, except as provided in paragraph 271b.

c. Passengers or cargo may not be carried on airworthiness test flights. However, if airworthiness is not in question, and an evaluation type flight is needed for equipment operational verification, the pilot in command has authority to authorize passengers and/or cargo to be aboard the aircraft.

271. EMBARKING PASSENGERS EN ROUTE.

a. Central Aircraft Dispatch (CAD), or the manager having jurisdiction over flight hours are the approval authorities for embarking passengers en route when contact with one of these sources is available.

b. The pilot in command of an approved flight may embark passengers en route when CAD services or other approval authority is not conveniently available by telephone or radio. He/she shall assure, however, that the embarking passenger(s) clearly meet(s) the criteria and conditions of Order 4040.9C, paragraphs 48e and 242c, and paragraph 270 of this order. The pilot in command shall also ascertain that each passenger embarked in a foreign country has been properly cleared by the appropriate foreign government officials, i.e., Customs, to depart the country. The name, purpose of passage, and all other pertinent information shall be entered in the remarks section of FAA Form 4040-6, whenever this authority is exercised.

272. TRANSPORTATION OF HAZARDOUS MATERIALS. The transportation of hazardous materials shall be in compliance with 49 CFR Parts 100 through 199, with International Civil Aviation Organization (ICAO) technical instructions for the safe transport of dangerous goods by air, and with Order 1650.9, Transportation of of Hazardous Materials.

273. - 279. RESERVED.

SECTION 8. USE OF PRIVATE, RENTED, OR CLUB AIRCRAFT ON OFFICIAL GOVERNMENT TRAVEL

280. GENERAL CRITERIA. Order 1500.14, Travel, provides for the use of privately owned aircraft as a means of performing official travel under circumstances where the employee pays for the expense of operating the aircraft and is later reimbursed for its use. Paragraph 130b(37) of Order 1500.14 should be consulted for the definition of privately owned or travel aircraft and paragraph 420-S1 of the FAA supplement to Order 1500.14 provides additional guidance on the subject. The following provisions apply:

a. The pilot in command must possess at least a private pilot certificate, a current medical certificate, and meet the appropriate recent flight experience levels prescribed in FAR Part 61.

b. The provisions of paragraph 242 of Order 4040.9C and paragraph 270 of this order concerning carrying passengers shall apply to the use of aircraft under the requirements of Order 1500.14, except in the case of qualified agency employees piloting their own private aircraft on official travel and claiming reimbursement for mileage only.

c. Reimbursement to employees performing travel in private, rented, or club aircraft will be in accordance with the provisions of Order 1500.14.

281. - 299. RESERVED.

CHAPTER 3. AIRCRAFT OPERATIONS

SECTION 1. PREDEPARTURE PROCEDURES

300. COMMAND AND CONTROL.

a. Command. Aircraft shall be flown only under command of the pilot authorized by proper authority to make the flight. The pilot in command is directly responsible for and is the final authority as to the safe and orderly conduct of the flight from the time he/she begins preparation for the flight until the termination of the flight and all procedures associated therewith. The pilot in command is responsible to see that the aircraft is operated in accordance with approved operational procedures. An approved written checklist shall be used for each phase of flight. The authority and status of the pilot in command and the status of other occupants of the aircraft shall be definitely understood prior to flight. The authority and responsibility of the pilot in command of a flight or series of flights may not be transferred to another individual except as required by emergency circumstances or as specified in writing on a schedule or flight plan. The fact that the pilot may relinquish physical control of the aircraft to another pilot does not alter his/her basic assignment of authority and responsibility for the flight.

b. Control. The pilot in command determines who shall operate the controls during all phases of flight. Under normal circumstances, only the person who is designated as a pilot in accordance with Order 4040.9C, chapter 2, shall be permitted to operate the primary flight controls. The pilot in command should operate the primary flight controls when marginal flight conditions exist or when potentially hazardous operations are undertaken. Specific examples include test flights, landing during critical crosswinds conditions, and flight with an engine inoperative.

c. Transfer of flight controls. Change in physical control of the aircraft's primary flight controls shall be made in a positive manner. Simple voice procedures may be used to make the transfer. The pilot exercising control is responsible until the relieving pilot verbally acknowledges acceptance of the controls. The final responsibility for the safe conduct of the flight, however, rests with the pilot in command. The pilot in command shall physically assume control of the aircraft immediately if any confusion exists as to who has control.

301. PREFLIGHT PROCEDURES. Prior to flight, the pilot in command shall personally assure that:

a. A flight plan is filed. It may be filed in the air immediately after departure at locations where facilities for filing flight plans are unavailable.

b. Weight and balance is within limits, and will remain within limits throughout the flight.

c. The aircraft "ready-for-flight" CG location is entered in the remarks block on the flight plan.

d. Weather and NOTAMS have been checked.

e. Departure, destination, and alternate airports/heliports meet the weather minimums, wind restrictions, and runway/landing area criteria of this order and aircraft flight/operations manuals.

f. Fuel stops are planned, when practicable, where contract or military fuel is available.

g. Operations manual and Operations Alert Directives have been checked.

h. The aircraft logbook has been checked for the required amount of fuel and oil, carryover and Minimum Equipment List discrepancies, alert envelope material, and proper maintenance release.

i. The aircraft has been given the required daily/preflight inspection. The preflight portion of the aircraft checklist may be used by the pilot in command to perform a daily/preflight inspection when away from an agency maintenance facility.

j. All cargo has an appropriate legible Bill of Lading or other identifying label describing the article, listing its gross weight and the addressee to whom it is consigned.

k. All cargo and baggage shall be stored in accordance with the requirement of FAR Section 91.203.

l. A passenger manifest is left with a responsible party.

m. A thorough exterior and interior visual inspection has been made by a flight crewmember. This includes an aircraft security check for hidden devices that could jeopardize the safety of the crew and passengers. The pilot in command shall ensure that all frost, snow, or ice has been removed from the aircraft in accordance with the appropriate aircraft flight/operations manual, and that the following documents and equipment have been properly secured and are aboard:

(1) Aircraft Registration Certificate.

(2) Aircraft Airworthiness Certificate or FAA Noncertificated Public Aircraft Document.

(3) A current aircraft flight manual or operations manual and radio station license.

(4) Weight and balance information.

(5) FAA Form 4100-8, Aircraft Logbook. (An aircraft logbook is not required to be in open market rental aircraft, but it should be available for inspection.)

(6) Adequate supply of daily and preflight inspection forms. (Open market rental aircraft excepted.)

(7) Appropriate and current maps, charts, instrument approach charts, and related material.

(8) Appropriate cockpit checklists.

(9) Required survival equipment.

(10) Appropriate credit cards, purchase order forms, etc.

(11) Operative flashlight accessible to each flight crewmember. (Open market rental aircraft excepted, unless night flight is anticipated.)

n. Crewmembers meet the currency requirements of Order 4040.9C, chapter 5.

o. All occupants are aware of their status and have been briefed on emergency equipment and procedures.

p. The pilot in command has properly accepted the aircraft in writing on FAA Form 4100-8, thereby acknowledging responsibility as pilot in command.

q. The aircraft has been released for flight in writing by the proper authority (agency-owned/leased aircraft).

302. PASSENGER BRIEFING. When passengers are aboard, the pilot in command shall ensure that they are briefed concerning the following rules and procedures where appropriate:

a. Smoking.

b. Use of seatbelts. This includes specific instructions on the fastening and release of passenger seatbelts. Seatbelts should be kept fastened en route to avoid injury resulting from turbulence.

c. Placing of seat back in upright position while the aircraft is taxiing and during takeoff and landing.

d. Ditching instructions and the location and proper use of the survival equipment on board.

e. Use of oxygen.

f. Storage of carry-on baggage.

g. Location of emergency exits.

303. FUEL AND OIL SERVICING. The pilot in command or designated crewmember shall normally supervise fuel, oil, or other ramp services when these services are accomplished by other than agency maintenance personnel or qualified personnel under contract with the agency to provide maintenance on the aircraft being serviced. During fueling operations, the following safety precautions shall be observed:

a. The aircraft will be grounded to the fuel truck or pit, the fuel nozzle, and to ramp grounding terminals, if available.

b. Engine switches and nonessential electrical equipment shall be in the "off" position. Operation of an auxiliary power unit, if available, while refueling shall be governed by instructions contained in the appropriate aircraft operations manual.

c. Smoking is prohibited aboard and within 100 feet of the aircraft.

d. No active radar transmitters shall be within 100 feet of the aircraft.

e. The correct grade of fuel has been put into the aircraft fuel tanks and the quantity received verified.

f. Fuel shall be checked for presence of water. For turbine fuel, utilize the procedures prescribed by Order 4100.24A, chapter 12, section 6.

304. FUEL REQUIREMENTS. Taking meteorological factors and known traffic delays into account, the fuel supply aboard agency aircraft at departure will be at least the quantities and reserves required by FAR Part 91 for flight within the contiguous 48 states, Hawaii, and Alaska.

305. RUNWAY, WIND, AIRPORT/HELIPORT INFORMATION.

a. Runways. The runway surface condition (airplane, gyroplane operations) is a factor that must be given consideration by the pilot in command to determine if a takeoff or landing can be safely made under existing conditions. The limitations listed in the aircraft flight or operations manual will apply.

b. A takeoff will not be attempted with more than 1/2-inch of wet snow, slush, and/or water, or 4 inches of dry snow on the runway.

> NOTE: Wet snow contains a great deal of liquid water. If free water entirely fills the airspaces in the snow, it is very wet. Dry snow cannot be readily made into a ball. These are subjective statements. A precise measurement cannot be made since dew point, temperature, cloud cover, and wind affect snow conditions.

c. In the operation of agency aircraft, two methods of reporting runway conditions are generally encountered:

(1) Commercial, Army, Navy, and many overseas airports report runway conditions in accordance with ICAO rules as "good," "medium," "poor," or "nil," which represents the effective braking action.

(2) The majority of U.S. Air Force airfields report two factors relating to runway condition. These are runway condition reading (RCR) and runway surface condition (RSC). RCR and RSC normally will be available only when water, ice, slush, or snow is present on runways. RCR will be reported in two-digit numbers from 02 through 25. The number 02 represents braking action nil and 25 braking action good, with intermediate conditions represented by numbers between.

RSC codes will be reported as:

WR - Wet Runway

SLR - Slush on Runway

LSR - Loose Snow on Runway

PSR - Packed Snow on Runway

IR - Ice on Runway

P - Patchy (to be used with codes above). "P" may be used as a suffix to the RCR code to indicate a patchy condition which may affect directional control during braking. Examples on weather sequences are: IR05P and WR16P.

(3) U.S. Air Force terminal air traffic controllers will include RSC and RCR in their weather relay to inbound crews. They use plain language: "Ice on runway, runway condition reading 05," "patchy wet runway", runway condition reading 16."

(4) The table in Figure 3-1 may be used to correlate the RCR readings with ICAO runway conditions report.

d. Crosswind guidelines. When runway surface conditions deteriorate to the point where effective braking action or directional control is measurably lowered, the maximum allowable crosswind component for all agency aircraft will be reduced accordingly. The contents of aircraft flight manuals (AFM) vary considerably between aircraft and may or may not contain references to any limiting or demonstrated crosswind values. If published, the flight manual limitation, corrected for runway surface condition, will apply. Figure 3-1 provides guidelines for determining recommended MAXIMUM takeoff and landing crosswind components for those instances where such data is not available. However, these guidelines are not intended to replace sound judgment and are to be used to assist in determining under what circumstances a safe takeoff or landing may be made.

FIGURE 3-1. RECOMMENDED MAXIMUM TAKEOFF AND LANDING CROSSWIND COMPONENT

Runway Conditions RCR	ICAO	Propeller Aircraft Takeoff & Landing	Turbojet Aircraft Takeoff & Landing	% Increase in Landing roll
02		0 Knots	0 Knots	
03		2	2	
04		5	4	
05	Nil	7	6	100% or more
06		10	8	
07		12	10	
08		15	12	
09		17	14	
10		20	16	
11		22	18	
12	Poor	25	20	99% to 46%
13		27	22	
14		30	24	
15		30	26	
16		30	28	
17		30	30	45% to 16%
18	Fair (Medium)	30	30	
19-25	Good	AFM Limitation	AFM Limitation	15% to 0%

e. Heliports. Snow should be removed to prevent "white-out" during hover and low-speed operations, or pilots should use snow, dust, or sand operating procedures during takeoffs and landings.

306. SEVERE WEATHER AVOIDANCE.

a. Icing. Aircraft shall not be operated into known or forecast severe icing conditions. Aircraft may be operated into light to moderate icing areas if equipped with approved means for anti-icing/deicing, provided the aircraft flight/operations manual procedures are followed.

b. Thunderstorms or turbulence. Aircraft shall not be operated into known or forcast severe turbulence or thunderstorms. Areas of lesser activity may be traversed if the aircraft involved is equipped with an operating radar and the route of flight is altered to avoid severe weather.

c. Frost. Aircraft shall not become airborne until all frost/ice/snow has been removed from the surfaces, using approved removal methods.

307. INTERNATIONAL AND EXTENDED OVERWATER FLIGHTS.

a. ICAO Requirements. Agency aircraft operating internationally will be governed by ICAO civil flight requirements. While operating outside the United States, pilots will comply with Annex 2, Rules of the Air, to the Convention on International Civil Aviation, or the regulations of any foreign country, whichever applies, and with any rule of this order or FAR Part 91, Subparts A and B, that is more restrictive but not in violation of Annex 2 or regulations of a foreign country.

b. Weather Minimums. When conducting IFR operations at foreign airports, pilots will comply with IFR minimums and instrument approach procedures prescribed or approved by the government of the country in which the airport is located, or the minimums prescribed in this order, whichever is higher.

c. Customs, Immigration, and Public Health. The pilot in command is responsible for ensuring that all persons aboard have the necessary documents for compliance with customs, immigration, and public health requirements on each flight.

d. Management Responsibilities. The manager of the organization to which the aircraft is assigned is responsible for assuring that:

(1) The required emergency and special navigational equipment are on board.

(2) The crew has been properly briefed for the intended itinerary and has the necessary en route materials, charts, and maps.

(3) The required en route clearances and other necessary special arrangements have been made.

(4) The crew meets the currency requirements of Order 4040.9C, chapter 5, including survival and ditching training.

308. STARTING AIRCRAFT ENGINES.

a. Engines will be started only when one of the following qualified personnel occupies a pilot's seat:

(1) A pilot qualified in type or one in training who is authorized by his/her instructor to start the engines.

(2) An authorized agency mechanic with a current "Authorization to Taxi and Engine Run-up Card" specified in Order 4100.24A, chapter 3, section 6, on file.

(3) Personnel under contract with the agency to provide aircraft maintenance.

b. Before starting, the following precautions shall be observed:

(1) The parking brake shall be set, if so equipped.

(2) When reasonably available, a safety observer shall be positioned in the immediate vicinity of the aircraft during start procedures. The observer shall assume a position from which the engine being started can be observed and at the same time can remain in visual contact with the cockpit crew. The safety observer's function is to observe the engine start and the aircraft in general and to alert the crew of any abnormal or unsafe condition. This requirement may be waived by the pilot in command when long delays are anticipated.

(3) Rotating beacons will be turned on as a warning of intent to start -- or that engines are operating, provided the electrical system permits such action.

(4) Before conducting an engine runup, the aircraft shall be positioned in such a manner that propeller, rotor, or exhaust blast will not cause damage to other aircraft or equipment.

309. TAXIING AIRCRAFT.

a. Agency aircraft shall be taxied only by the following personnel:

(1) Pilots qualified in type or in training for familiarization or qualification in type.

(2) Authorized agency mechanics with current "Authorization to Taxi and Engine Run-up" cards on file.

(3) Personnel under contract with the agency to provide contract maintenance.

NOTE: Both cockpit seats of large aircraft shall be occupied during taxi operations and at least one occupant will be qualified in accordance with subparagraphs (1) through (3).

b. Taxi signals listed in the Airman's Information Manual shall be utilized for all taxi operations when signalmen are available.

310-319. RESERVED.

SECTION 2. DEPARTURE, EN ROUTE, AND LANDING PROCEDURES

320. USE OF SEATBELTS AND SHOULDER HARNESSES. The pilot in command shall ensure that all flight crewmembers have their seatbelts fastened, where appropriate, while at their duty stations and that all others use seatbelts during takeoffs and landings and when required by turbulence or flight maneuvers. When provided, shoulder harnesses will also be used during takeoffs and landings.

321. WEATHER MINIMUMS.

a. General. Weather minimums for operation of agency aircraft reflect those published by civil or military approach procedure charts. Greater landing minimum than those published for military use at military airports may be required (reference paragraph 331). If specific takeoff minimums are not prescribed, the standard visibility minimum for takeoff is 1 statute mile for single- and two-engine aircraft and 1/2 mile for three- and four-engine aircraft.

b. Lower than standard takeoff minimums at civil and military airports. On runways where standard takeoff minimums are authorized, the following minimums are also authorized:

(1) One-fourth mile or RVR 1600 when any of the following visual aids are available:

(a) HIRL,

(b) Runway centerline lights,

(c) Runway centerline markings which must be visible throughout the takeoff run, or

(d) In unusual circumstances where neither (a), (b), or (c) above is available, the runway is marked in such a manner that the pilot at all times has visual reference to the line of forward motion during the takeoff run.

(2) Touchdown RVR 700 (if operative, mid RVR 700), and rollout RVR 600 on runways having operative centerline lights, runway centerline markings, and either two or three operative transmissometers capable of reading as low as RVR 600.

(3) The following special provisions are applicable to lower than standard takeoff minimums:

(a) A minimum crew of two pilots is required.

(b) Dual attitude instruments must be installed, one at each pilot station, and with independent power sources.

c. Takeoff minimums at airports with no published instrument approach procedure. Agency aircraft may take off from airports that have no approach procedure provided the ceiling is 300 feet or more, visibility is 1 mile or more, and the pilot has studied local terrain and obstructions and determined that a safe takeoff can be made. If the airport is not serviced by the National Weather Service or other authorized official observer, the pilot shall make weather observations and determine when weather conditions are satisfactory for flight.

322. USE OF AUTOPILOT. When flight conditions permit outside surveillance, maximum use of the autopilot is encouraged to make full use of the "see-and-be-seen" principle to avoid midair collisions.

323. USE OF OXYGEN.

a. All Operations shall comply with FAR Section 91.32.

b. Each crewmember shall be constantly on the alert for symptoms of hypoxia.

c. Each flight crewmember shall personally preflight his/her oxygen equipment to ensure that the mask is functional, fitted properly, and connected to a supply terminal with an adequate oxygen supply.

d. If the provisions of FAR Section 91.32 are in conflict with the airplane flight manual, the most restrictive of the two requirements shall apply.

324. AUTHORIZED MANEUVERS.

a. When agency manuals include a maneuvers package, only the maneuvers specified therein shall be practiced or demonstrated, and the minimum altitudes specified shall be observed as aircraft limitations.

b. In the absence of a maneuvers package for the specific type aircraft involved, the following maneuvers are limited as indicated:

(1) Approaches to stalls, maneuvering at minimum speeds, and unusual attitude recoveries in large aircraft shall be conducted at 6,000 feet AGL or above. Practice stalls in large aircraft are prohibited.

(2) Approaches to stalls, maneuvering at minimum speeds, and unusual attitude recoveries in small aircraft shall be conducted at 4,000 feet AGL or above.

(3) Spin recoveries shall be COMPLETED at 4,000 feet AGL or above.

(4) Engine shutdown and restart in flight on multiengine aircraft shall be conducted at 4,000 feet AGL or above.

(5) Practice stalls are prohibited when the propeller of one engine is feathered.

325. ENGINE FAILURE.

a. Two-engine aircraft. The pilot in command will land at the nearest suitable airport when one of the engines become inoperative.

b. Three- or four-engine aircraft. When one engine of a three- or four-engine aircraft becomes inoperative, the pilot may proceed to an airport of his/her choice if this action is considered to be as safe as an immediate landing. If two engines become inoperative, he/she shall land the aircraft at the nearest suitable airport.

326. BOMB THREAT. The following immediate action shall be taken when there is reason to believe that a bomb has been placed aboard an agency aircraft:

a. The nearest air traffic control facility shall be informed and requested to notify appropriate civil authorities responsible for search, security, crowd control, or fire.

b. In flight, the crew shall immediately conduct a bomb search, if possible. The passengers shall be isolated as possible to lessen their danger. The pilot in command shall land the aircraft as soon as possible. The crew shall not touch or move any bomb device they may find.

c. On itinerary, the pilot in command shall supervise any isolation directed by the control tower and shall direct the evacuation of crew and passengers.

327. EMERGENCY FREQUENCY MONITORING/SEARCH. Agency flightcrews are expected to monitor emergency frequencies, and upon request take part in actual searches. The procedures to be utilized by agency flightcrews regarding emergency locator transmitter (ELT) monitoring, alerting, search, and reporting of related flight-hour expenditures are:

a. Monitoring. Depending upon installed equipment, agency flightcrews are expected to monitor emergency frequencies as follows:

(1) Flightcrews having UHF equipment but not equipped with or having inoperative automatic frequency monitoring and alerting systems, will guard emergency frequency 243.0 MHz during all operations.

(2) Flightcrews having only VHF capability will monitor emergency frequency 121.5 MHz providing such action will not hinder the safe and proper operation of the aircraft.

b. Alerting. Emergency frequency transmissions shall be reported immediately in detail to an ARTCC, FSS, or control tower operator who, in turn, will alert appropriate search and rescue authorities. The report should include:

(1) Altitude of the reporting aircraft.

(2) Where and when the signal is first heard.

(3) Where and when the signal is heard loudest.

(4) Where and when the signal faded or was lost.

c. Search. Depending upon circumstances such as remaining fuel, existing weather, mission urgency, etc., crews of agency aircraft having automatic emergency frequency direction-finding capability will be expected to divert from the assigned mission and attempt to locate, identify, and render such assistance as possible to the source of the emergency frequency transmission. Findings will be reported to either of the facilities referred to in paragraph 327b.

d. Documentation. Flight hours that are expended while rendering assistance in search activities will be reported on FAA Form 4040-6 and will include documentation of known pertinent details in the remarks section.

328. HELICOPTER AUTOROTATIONS. Helicopter operations have accounted for a number of agency accidents. Most of these accidents have been associated with power-off landings -- one of the most critical and demanding maneuvers required of helicopter pilots. The following limitations shall be observed:

a. General limitations.

(1) To ensure that approving authority is aware that practice autorotations will be conducted on a given flight, a specific reference to the proposed autorotation activity will be made on line 4 of FAA Form 4040-6 or the "functions/purposes" section of the flight schedule prepared in accordance with paragraph 220a. Lessor approval is required when using open market rental aircraft.

(2) Autorotations should be practiced only after a thorough evaluation of the existing density altitude and wind conditions. The limitations and capabilities of the aircraft in use and the level of pilot proficiency should also be considered.

(3) A positive wind direction indicator must be available to the pilot and the autorotations will be planned so the final approach and landing/recovery will be within 20 degrees of the wind direction.

(4) The pilot in command of a flight during which autorotations will be practiced shall be a certified helicopter flight instructor and be current in accordance with Order 4040.9C, chapter 5. In addition, within the previous 60 days, he/she shall have logged 2 hours' pilot time and made at least five autorotations to power-off landings in that type aircraft. A pilot who fails to meet the POWER-OFF LANDING requirement of this paragraph is required to make the five landings with a fully qualified pilot in command aboard.

(5) Prior to making autorotations to power-off landings, the pilot shall, on the same flight, make a minimum of three power recovery autorotations and three hovering power-off landings.

(6) When two pilots are practicing autorotations, the pilot in command shall ensure that prior to commencing each autorotation the expected actions of each pilot and the planned mode of termination (power recovery or power-off landing) are agreed upon. Intentions to deviate from the agreed-upon maneuver should be positively communicated between the pilots.

(7) Autorotations shall be practiced to a prepared and maintained surface. All autorotations shall be initiated at a point from which a safe landing can be made in the event of an actual engine failure.

(8) Practice autorotations shall not be conducted from sunset through sunrise.

(9) There shall be no passengers aboard.

b. Precautions. In addition to the limitations specified in paragraph 328a, the following items shall be considered by pilots in command of helicopter currency flights:

(1) Autorotations should normally be practiced later in each flight when personnel are more proficient and aircraft gross weight is lower.

(2) The value of power recovery autorotations versus autorotations to power-off landings should be considered as a means of meeting a desired training goal.

(3) Wind velocity of 10 knots is recommended as a minimum during practice autorotations.

(4) Power-off landings, from altitude, should be conducted at facilities where fire/crash equipment is available.

329. PRACTICE EMERGENCY DESCENT. The following procedures are to be followed by all operating elements when simulated emergency descents are being practiced:

a. The emergency descent shall be terminated when the airplane is in the proper configuration and stabilized at the desired body angle. Minimum altitude during recovery is --

(1) 14,000 feet MSL for turbojet airplanes.

(2) 4,000 feet AGL for all other airplanes.

b. Simulated emergency descents shall not be accomplished through or near clouds, except when cleared to do so by air traffic control.

c. Prior to and during simulated emergency descents, maximum attention shall be given to remaining clear of other aircraft by visual alertness and assistance from air traffic control, when possible.

330. ALTITUDE AWARENESS CALL-OUT PROCEDURES. The altitude awareness call-out procedures listed below shall be utilized when more than one flight crewmember is used for flight:

a. During climb to assigned altitude, the pilot not flying shall call out altitudes approaching:

(1) 1,000 feet below assigned altitude.

(2) Assigned altitude.

(3) 18,000 feet, when appropriate, as a reminder to reset the altimeter.

b. During descent from en route flight altitude to initial approach altitude, the pilot not flying shall call out:

(1) 1,000 feet above assigned altitude.

(2) Assigned altitude.

(3) 18,000 feet, when appropriate, as a reminder to reset the altimeter.

(4) 10,000 feet as a reminder to reduce airspeed, if necessary.

(5) 1,000 feet above initial approach altitude or above field elevation for VFR approaches.

c. When an instrument approach is required, the pilot shall review the instrument approach chart, prior to initial approach fix, for the following:

(1) Type of approach and runway/landing area.

(2) Field elevation.

(3) Minimum descent altitude or decision height.

(4) Missed approach procedures.

(5) Compute/estimate required rate of descent for approach speed being used and/or determine elapsed time from final approach fix to missed approach point.

d. The flightcrew shall complete the final checklist before reaching the final approach fix or as soon as practicable thereafter. Conversation shall be limited to aircraft operation. During the final approach the pilot not flying shall make the checks and call outs as indicated below:

(1) Final fix inbound. Cross-check altimeters, instruments, and flap warnings, if any. During a flight director autocoupled approach, both pilots shall confirm proper flight director autocoupler mode and glide slope lock-on, as appropriate. Raw navigation data shall be monitored during the approach and SIGNIFICANT EXCURSIONS called out.

(2) 500 feet above MDA or DH. Cross-check instruments and flag warnings. Call out SIGNIFICANT EXCURSIONS from planned airspeed, rate of descent, or other parameters, including the prescribed approach procedure.

(3) 100 feet above MDA or DH.

(4) MDA or DH.

(a) Runway/landing area in sight, if the requirements of FAR Part 91 exist upon reaching DH or the missed-approach point. If not,

(b) Go-around. Monitor the rate of climb. Call out SIGNIFICANT EXCURSIONS from the planned missed-approach procedure.

(5) During Airport Surveillance Radar approaches, the pilot not flying should confirm to the pilot flying the aircraft all "should be" altitudes given by the final controller. ("Should be" altitudes are usually available upon request.)

(6) When a flight engineer or flight mechanic is aboard, he/she may be briefed to monitor the progress of the approach and alert the pilots should they fail to call out 500 FEET ABOVE MDA or DH, 100 FEET ABOVE MDA or DH, MDA or DH, airspeed slower than Vref or faster than Vref + 10 knots, or sink rates greater than 1,000 feet per minute.

e. During turbojet operations, the pilot not flying shall call out significant deviations from the following rate of descent criteria:

(1) The desired rate of descent for approach and landing is 600 to 800 feet per minute.

(2) The maximum usable rate of descent for approach and landing is 1,000 feet per minute.

(3) Whenever the aircraft is estimated to be within 1 mile of the airport of intended landing on final approach and the rate of descent is in excess of 1,000 feet per minute, the approach should be discontinued and a go-around initiated.

331. MILITARY AIRPORT LANDING MINIMUMS. Pilots operating agency aircraft into military airports are restricted to the minimums stated in paragraph 321a (standard minimums) or HAT of 200 feet and a visibility of 1/2 mile, whichever is greater. Category II minimums apply, however, if the military runway being used and the agency crew, aircraft, and equipment have been approved for Category II operations.

332. CONTACT APPROACHES. Contact approaches will be conducted in accordance with the following conditions and limitations:

a. When a circling approach is required to the runway of intended landing, the reported ceiling and visibility must be equal to or better than the IFR minimums prescribed in the applicable instrument approach procedure for circling approaches.

b. When a straight-in approach is planned to the runway of intended landing, the reported ceiling must be equal to or better than the MDA prescribed in the applicable instrument approach procedures for a nonprecision straight-in approach to such runway. The reported visibility must be at least 1 mile, and in no case less than any higher IFR visibility minimum prescribed.

c. Descent below MDA is not authorized unless the threshold of the itended landing runway/area is in view at all times.

333. LANDINGS.

a. Touch-and-go landing procedures, if published in the checklist, shall be followed. Before landing, the pilot must brief the copilot on the procedures to be used and exactly which steps will be performed by each pilot. Touch-and-go landings are authorized in aircraft certificated for single pilot operation.

b. After-landing checklist. Complete the landing roll and exit the runway before operating any levers or switches, unless unusual circumstances or good operating practices call for such action sooner.

334. COMMUNICATIONS.

a. Change in proposed itinerary. Any changes in the proposed itinerary which will result in an appreciable increase in the estimated flight hours or will cause a substantial delay will require notification and approval of Central Aircraft Dispatch or the official having jurisdiction over allocated flight-hours.

b. Emergency recall or diversion of aircraft. Agency aircraft are subject to recall or diversion on relatively short notice in the event of national emergency or other priority business requiring airlift support. To ensure emergency readiness, pilots shall maintain contact with:

(1) Region or Center Central Aircraft Dispatch, or

(2) Other areas - nearest 24-hour service air traffic control facility.

c. Telephone communications. The pilot in command away from his/her normal duty station will be expected to use the Federal Telecommunications System, if available.

d. Airborne communications. Washington Hangar 6 Operations and Atlantic City guard VHF frequency 123.4 MHz. Oklahoma City Operations guards 123.5 MHz. The use of this service for relaying priority messages, dispatching aircraft, reporting discrepancies, etc., is encouraged.

335. HIJACK PROCEDURES. Order 7110.49, Unlawful Interference - Hijack/Bomb (Threat) Aboard Aircraft - Procedures and Covert Signals, prescribe the procedures and signals which may be used by pilots of hijacked aircraft to covertly make their situation known to Air Traffic Control and to activate the appropriate assistance to assure a safe resolution.

336. COCKPIT VOICE RECORDERS (CVR). The cause of an accident or incident often depends upon information obtained from the CVR. Each operating activity shall ensure that flightcrews and maintenance personnel are familiar with the requirements of NTSB, Part 830, as contained in Order 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting, appendix 4, concerning CVR data retention -- and that adequate equipment operating instructions are established to prevent inadvertent erasure of pertinent information.

337. MINIMUM EQUIPMENT LISTS (MEL'S). These lists have been developed for some agency aircraft. When published, these documents are part of the appropriate aircraft operations manual or airplane flight manual and shall be used to determine if a flight may be continued with inoperative aircraft equipment without issuance of a special flight authorization. Certain flight manuals may contain an Equipment Deviation List prepared by the manufacturer. Such lists may be used only if there is no approved MEL for that aircraft.

338. - 349. RESERVED.

SECTION 3. POSTFLIGHT PROCEDURES

350. PARKING AND SECURITY.

a. The pilot in command is responsible for assuring that his/her aircraft is properly parked and secured. When an aircraft is left unattended for an extended period or parked overnight, the following precautions shall be taken:

(1) Close and lock all doors, windows, or hatches, if possible.

(2) Remove or stow any ladders, steps, or maintenance stands.

(3) Ensure that all inspection plates are secured.

(4) Install dust covers or other types of plugs or covers that are provided for the aircraft.

(5) Park the aircraft in a well-lighted area, if possible.

(6) Secure the aircraft with tiedowns and chocks, if applicable.

(7) Arrange for frequent irregularly timed patrols and observations of the aircraft by responsible airport personnel, if necessary.

(8) In the case of severe weather, the aircraft shall be hangared or flown from the area, whichever the situation dictates.

b. In the event of a civil disturbance, agency aircraft shall be moved or placed under guard as the situation requires. The aircraft shall be inspected both internally and externally just prior to takeoff. Once this security inspection has been completed, the aircraft shall not be left unattended.

c. When carrying cargo, determine the contents and origin of each piece of cargo or baggage. Do not accept any item for transport on the aircraft unless the item and the person who delivers the item to the aircraft is positively identified.

351. CLOSING FLIGHT PLAN. The pilot in command shall assure that his/her flight plan has been closed.

352. - 359. RESERVED.

SECTION 4. CREW SCHEDULING

360. MAXIMUM FLIGHT HOURS. Flight crewmembers shall not exceed these flight hours:

a. 120 flight hours in any 30 consecutive days.

b. 300 flight hours in any 90 consecutive days.

c. 1,000 flight hours in any 12-month period.

361. MAXIMUM CREW DUTY HOURS. Crew duty hours include preflight, postflight, and other nonflying duty hours as well as flights.

a. Pilots.

No. of Pilots In Crew	Maximum Crew Duty Hours in 24-Hour Period
1	12
2	16
3	18

b. Flight Engineers.

No. of FE's In Crew	Maximum Crew Duty Hours in 24-Hour Period
1	16
2	18

362. CREW REST. Flight crewmembers must have 10 hours rest before the start of any duty period which will require flying. In an emergency, unusual circumstances, or when the mission is considered of overriding importance, the pilot in command or responsible manager may authorize a flight after completion of a prior duty period, provided the total duty time for the 24-hour period does not exceed maximum crew duty times listed in paragraph 361.

363. - 369. RESERVED.

SECTION 5. CATEGORY II OPERATIONS

370. GENERAL.

a. Category II operations will be authorized when certification standards are met with respect to crew qualification, airborne equipment and systems, and preparation of the required operations and maintenance manuals.

b. Initial certification for these operations will be determined by operational needs, and requires approval by AVN-1 and the appropriate ACDO/GADO inspectors or region or center designated team, if appropriate.

c. The pilot in command must hold a current Category II letter of authorization for the type aircraft to be used and utilize the services of a second in command who holds a current instrument rating or Airline Transport Pilot Certificate. In addition, the second in command shall be familiar with and be capable of performing the second in command duties as prescribed in the approved operations manual. The responsibility to meet the experience, proficiency, recency of experience, and renewal requirements for a letter of authorization rests with the designated agency pilots holding such letters and with the managers to whom the aircraft are assigned.

371. PROCEDURE FOR SECURING APPROVAL FOR CATEGORY II OPERATIONS.

a. Managers of units which require Category II operations shall submit for approval to AVN-1 their justification for requiring lower minimums. The request must include the names of the pilot in command and identify by type and registration number the aircraft they wish to use.

b. Following approval, AVN-1 will establish project authorization for:

(1) Installation of the necessary equipment in the aircraft.

(2) Preparation of required maintenance and operations manual.

(3) Development of a supporting maintenance system.

c. Category II manuals will become part of the FAA Technical Issuance System.

d. A list of all agency aircraft and pilots approved for Category II operations shall be maintained by AVN-1. Region/Center Directors will provide current information on the status of their aircraft and pilots to AVN-1.

372. CATEGORY II MANUAL. The Category II manual, as a segment of the airplane operations manual, will become part of the Technical Issuance System (TI). The associated maintenance programs will be contained in the appropriate TI maintenance manual for the aircraft. The Category II manual will set forth in a single document basic responsibilities, limitations, and operational procedures. The format for Category II manuals will follow guidance provided in attachment 1 of Advisory Circular 91-16, Category II Operations - General Aviation Airplanes.

373. - 399. RESERVED.

CHAPTER 4. FLIGHT SAFETY

SECTION 1. FLIGHT SAFETY PROGRAM

400. GENERAL. The FAA, charged with the responsibility of promoting aviation safety, shall exemplify, in its own aircraft operations, the standards required of others. To achieve this goal, continuous emphasis on accident prevention programs is required at all levels of supervision. Aircraft performance capabilities and human limitations, together with the many variables and hazards inherent in flight operations, tend to complicate the task of managing aviation resources effectively. If hazards are not recognized and either eliminated or adequately provided for, accident potential will be high and the effectiveness of each aircraft operation will be compromised. Experience has demonstrated the value of accident prevention programs in reducing aircraft accident potential and enhancing overall mission effectiveness. The mission of flight safety is to improve the operational capability of aircraft operating elements by conserving manpower, equipment, and funds through a reduction in accident potential. The goal of flight safety is not safety itself but rather a high level of readiness characterized by accident-free operations.

401. ACCIDENT PREVENTION. Most accidents are preventable and are the result of a failure or series of failures, either human or mechanical. Virtually all mechanical failures may be attributed to human failure at some point, either in the design, manufacture, maintenance, or operation of equipment. Thus, if accidents are to be prevented, it is necessary to detect and guard against human error at every stage of operation. This requires a continuous review of all phases of aviation activities affecting flight safety so that mistakes or potential mistakes can be identified and corrected. Accident prevention requires the active participation of all personnel. Each individual associated with aircraft operations, whether in an operational or supporting role, contributes directly to the effectiveness of flight safety.

402. RECOMMENDATIONS FOR ACCIDENT PREVENTION. Constructive recommendations for accident prevention are encouraged at all times. The following are some methods employed in accident prevention:

a. The aeronautical hazard reporting system described in Order 4040.9C, paragraph 706, and paragraph 506 of this order.

b. The aviation safety reporting program described in AC 00-46B, Aviation Safety Reporting Program.

c. Any other recommendations for accident prevention submitted and handled in accordance with procedures prescribed in Order 8020.11.

SECTION 2. FITNESS OF FLIGHT PERSONNEL

403. GENERAL. Aircraft and ground training can be effective only if the personnel who are participating are fit to fly. Inadequate nourishment, lack of sleep, excesses which lower efficiency, inattention to minor illnesses, distraction, or preoccupation are incompatible with safety of flight. Abuse of the body in any form should be viewed in the same light as improper maintenance of an aircraft. A professional approach to flying requires a thorough knowledge of one's

limitations, idiosyncracies, and physical and mental condition. Individuals are responsible for maintaining high levels of physical and mental fitness.

404. FACTORS AFFECTING FITNESS.

a. Sleep and Rest. Adequate and regular sleep is required to maintain the body's store of vital energy. Fatigue is alleviated and mental alertness is restored by proper sleep. Noise, excitement, worry, or any other condition that is not conducive to restfulness diminishes the benefits of sleep. While the optimum amount of sleep varies widely between individuals, the standard is 8 hours in every 24-hour period. Factors such as fatigue, illness, and emotional stress tend to increase this standard. Flights, duties, and other activities should be scheduled with due regard for provision of adequate sleeping time.

b. Diet. The optimum diet is based on the individual's caloric needs and the adequate provision of essential nutrients. The assistance of a flight surgeon or dietitian should be obtained in calculating the caloric value of food needed, especially in hot or cold climates. A medical authority should always be consulted when using a special diet, especially for the purpose of gaining or losing weight. The regularity with which meals are taken is as important as the type of food consumed.

c. Excercise. Requirements for exercise are variable from individual to individual. Some form of physical exercise is necessary to keep the body in fit condition.

d. Alcohol. Alcohol is a powerful depressant and has an anesthetic effect. This depressant action impairs judgment and muscular control. The liver can oxidize only about one-third of an ounce of alcohol per hour. This process must continue at that same slow rate until all the alcohol is oxidized. Thus it may require, depending upon the amount of alcohol consumed, several hours for the body to recover completely from its effects. Flight personnel who are impaired by alcohol, even to the slightest degree, should be grounded. Chronic impairment should be considered sufficient grounds for permanent removal from flight status.

e. Tobacco. Smoking causes a depression of the nervous system and an impairment of vision. The carbon monoxide resulting from the combustion of tobacco is absorbed by the bloodstream in preference to oxygen, and thus results in a lowering of altitude tolerance. Tobacco smoke also acts as an irritant to the respiratory system.

f. Coffee. The drug caffeine, contained in coffee, can produce an adverse effect on the body. The amount of caffeine contained in just two cups of coffee appreciably affects the rates of blood flow and respiration. In small amounts, coffee can be considered a nervous system stimulant. Excessive amounts may produce nervousness, inability to concentrate, headaches, and dizziness.

g. Drugs. Self-medication of any form by flight personnel can be extremely dangerous. Even relatively common medicines such as aspirin, antihistamines, cold tablets, and tranquilizers may seriously impair the coordination and concentration required during flight. Personnel engaged in flight operations should make it a standard practice to take only pills or medicine that is prescribed and approved by a flight surgeon.

h. Minor Illnesses. The common cold, digestive upsets, and other minor illnesses which do not seriously handicap individuals in other pursuits, may produce intolerable impairments in flying personnel. Inflammation accompanying a cold can cause extreme discomfort during altitude changes and can result in permanent injury. Distention caused by gas in the stomach or intestines may create symptoms varying in intensity from mild discomfort to incapacitating pain. Flight personnel should realize that flight may cause seemingly minor illness to become potentially dangerous.

i. Mental and Emotional Fitness. The safe and effective operation of aircraft requires close attention, ability to ignore distractions, and a high degree of emotional control. In-flight emergencies often demand rapid, accurate decisions, and skillful actions. Attention to the job-at-hand can be dangerously diverted by concern over non-related problems. Flight personnel who are preoccupied with personal, domestic, or other problems, or who exhibit signs of poor mental attitude or emotional instability should not be permitted to fly.

405. FLIGHT RESTRICTIONS AFTER USE OF DRUGS OR MEDICINES.

a. No medicine other than aspirin, APC (aspirin, phenacetin, and caffeine), and similar drugs shall be taken by any individual, either while performing duties as a flight crewmember or scheduled for such activities, except after consultation and advice of a flight surgeon.

b. Except in an emergency, no pilot in command shall permit a person who is obviously under the influence of drugs (except a medical patient under proper care) to be aboard his/her aircraft.

c. No agency employee or other person shall act as a flight crewmember on an agency aircraft while under the influence of any drugs that may affect his/her faculties -- or after the use thereof, within less than the following minimum elapsed time:

(1) Twelve hours after the last dose of any antihistamine drug, motion sickness drug, antidiarrheal mixture, barbiturates or sedative drugs, unless cleared sooner for flight by a qualified flight surgeon.

(2) Twenty-four hours after receiving inoculations, except smallpox and oral polio, which require no waiting period.

(3) Forty-eight hours after the last dose of tranquilizers, antihypertensive or belladonna-type drugs, unless cleared sooner for flight by a qualified flight surgeon.

(4) Ninety-six hours after the last dose of griseofulvin or other fungicidal drugs used orally in the treatment of skin diseases, unless cleared sooner for flight by a qualified flight surgeon.

406. FLIGHT RESTRICTIONS AFTER CONSUMPTION OF ALCOHOLIC BEVERAGES.

a. Except in an emergency, no pilot in command shall permit a person to be aboard his/her aircraft who is obviously under the influence of alcohol.

b. No agency employee or other person shall act as a flight crewmember on an agency aircraft until a minimum of 8 hours has elapsed since alcohol was last consumed.

407. FLIGHT RESTRICTIONS AFTER BLOOD DONATIONS. Because of the potentially adverse effect of temporary blood deficiencies, the following restrictions shall be observed after blood donations:

a. Flight personnel shall be grounded for a period of 24 hours after donating more than one-half pint of blood.

b. Flight personnel shall not be permitted to engage in flight above flight level 350 for a period of 72 hours after donating more than one-half pint of blood.

408. FLIGHT RESTRICTIONS AFTER SCUBA DIVES. Within 12 hours after scuba diving, flight personnel shall not fly or perform low-pressure chamber runs, compressed air dives, or high-pressure chamber runs unless examined and cleared for such activities by a qualified flight surgeon.

409. - 414. RESERVED.

SECTION 3. SURVIVAL EQUIPMENT

415. GENERAL.

a. There are numerous accounts of successful survival, based on little more than the will and desire to live. In almost every case, however, the individuals concerned were hardy outdoorsmen and well acquainted with the environment that they would encounter in the event of ditching or forced landing in remote areas. Past experience has shown that several other critical factors largely determine the survivor's chances for rescue.

b. Rescue facilities and forces are available throughout the world. Their most difficult problem, when called upon, is locating the crash site or survivor. The pilot can best ensure his/her own location by flying the filed flight plan and alerting ground stations at the first indication of an emergency. Adequate survival equipment and a thorough understanding of its limitations and use will greatly assist in the ultimate rescue. Ensuring that proper safety equipment is aboard and having knowledge of its use greatly increases the pilot's chance of survival. For ditching, adequate flotation is paramount. In all cases, an emergency locator transmitter, a portable emergency radio, and a visual signaling device will greatly assist location. Protection from the elements is extremely important. Many times protection can be easily improvised.

c. Available space in aircraft, gross weight limitations and mission requirements, in addition to terrain and climate, must be considered in determining what survival equipment should be aboard each aircraft. Equally important is effective crewmember training in the use of this equipment.

d. This section provides general requirements regarding survival equipment. Each region should amplify these requirements to the degree considered necessary.

416. EQUIPMENT REQUIREMENTS. Airplanes shall be equipped with an operable ELT. In addition, the following special survival equipment shall be provided by local operating activities and be aboard during operations over remote areas or large bodies of water. Open market rental aircraft shall be equipped to comply with the FOR HIRE provisions of FAR Section 91.33, when operated beyond power-off gliding distance from shore.

a. Emergency Radio. At least one portable emergency radio transceiver capable of communications on 121.5 MHz or 243.0 MHz and not dependent upon the aircraft power supply, shall be aboard when a single-engine aircraft is operated beyond power-off gliding distance from land or when a multiengine aircraft is on an extended overwater mission. The device shall be packed in a self-buoyant, water-resistant container.

b. Life Preserver. One approved inflatable, dual compartment, life preserver equipped with an approved survivor locater light shall be available for each person on extended overwater flights. A suitable flotation device will be available for each person aboard a single-engine aircraft that is operated beyond gliding distance of land, or when takeoffs or landings are made on water. Seaplanes and amphibian aircraft shall have life preservers aboard at all times; amphibian operations, on land only, are excepted. During takeoffs and landings on water, each occupant of a seaplane or amphibian shall have a life preserver readily available for donning. Wearing of life preservers is recommended.

c. Liferafts. Liferafts of sufficient capacity to accommodate the passengers, crew, and one additional occupant shall be aboard all aircraft on extended overwater missions. Each raft shall be equipped with an attached approved survivor locator light. Appropriately equipped survival kits shall be provided and shall contain at least a raft repair kit, a hand pump (except for those rafts having provisions for emergency oral inflation only), a first-aid kit, desalting kits, a signaling mirror, emergency rations, a tarpaulin, a fishing kit, a raft knife, a compass, sunburn ointment, chapsticks, oars, emergency water containers, flares, a radar reflector (space blanket), a bailing bucket or sponge, a retaining line, dye marker, a flashlight, and Survival Manual USAF 64-5.

d. Exposure Suits. Quick-donning exposure suits shall be provided in sufficient quantity to accommodate passengers and crew on extended overwater missions or single-engine operations that are beyond gliding distance to land. This requirement exists when:

(1) The water temperature is less than 59 degrees Fahrenheit,

(2) The outside air temperature (OAT) is less than 32 degrees Fahrenheit, or

(3) The combined OAT/water temperature is less than 120 degrees Fahrenheit.

NOTE: The requirement for exposure suits is waived when each liferaft aboard is equipped with a canopy.

e. Minimum Equipment Kit. The following miscellaneous survival equipment shall be available in kit form during all extended overwater flights or flights over remote areas:

(1) Police whistle.

(2) Two MK 13, Mod 0 Signals (or equivalent).

(3) Packet Genrus or Penguin Signals.

(4) Signal mirror.

(5) First-aid kit.

(6) Survival Manual USAF 64-5.

(7) SRU-16/8 Minimum Survival Kit (or equivalent) containing 10 matches, 4 fire starters, 2 striker strips, 1 pocket knife, 2 safety pins, 6 purification tablets, 2 needles, 1 compass, 3 fish hooks, 2 bandages, 1 water bag, and 1 instruction sheet.

(8) Flashlight.

f. Parachutes. Parachutes shall be worn or available in airplanes as directed by the manager to whom the airplanes are assigned.

g. Arctic Equipment. Except for multiengine turbine-powered aircraft flying passengers in transport category over regular air routes, appropriate arctic survival clothing shall be worn or available in sufficient quantity to accommodate the passengers and crew. Arctic sleeping bags in sufficient quantity to accommodate the personnel embarked shall be available when aircraft cross remote areas during periods specified by each region. When this requirement applies, sunglasses, snow goggles, emergency rations, chapstick, insect repellent, wax candles, a survival weapon, and, in the case of an airplane operation, a portable ELT shall also be aboard.

h. Desert Equipment. Sleeping bags, sunglasses, emergency water and rations, chapstick, sunburn ointment, insect repellent, and a survival weapon shall be aboard when aircraft traverse desert areas and as otherwise specified by each region and center.

i. Additional Equipment. The foregoing requirements should be supplemented by the responsible managers as experience and local conditions require.

j. Exception. The requirement for a survival weapon may be waived by the official having jurisdiction over the allocated flight-hours if the aircraft involved is to be landed in a foreign country which prohibits such weapons.

417. LIFERAFT PROCUREMENT REQUIREMENTS. All requests for procurement of liferafts shall be directed to the Aircraft Maintenance and Engineering Division, AVN-300.

418. STOWAGE REQUIREMENTS. All survival equipment shall be stowed in a manner so as to make it easily accessible if ditching or a crash landing is imminent. It shall be installed in conspicously marked approved locations. Special care shall be taken by all personnel involved to ensure that this equipment remains clean and serviceable.

419. BRIEFING OF PASSENGERS. When survival equipment is aboard, the pilot in command or his/her designated representative shall ensure that passengers are briefed on its location and proper use. On large aircraft, the pilot in command shall assign crewmembers specific and alternate duties and responsibilities for evacuation prior to ditching or crash landing. The instructions in the aircraft operations manual should be followed.

420. MAINTENANCE REQUIREMENTS. Requirements for the maintenance of survival equipment are contained in Order 4100.24A, chapter 25.

421. SUPPLEMENT REQUIREMENTS. Appendix 3 has been reserved for use as a region and center supplement. This supplement will amplify this and other chapters as necessary, and shall specify and define:

a. Remote, arctic, and desert areas within each region/center sphere of operations -- in chart or written form.

b. Periods of time when winter survival equipment will be aboard.

c. Additional equipment to be aboard.

422. - 499. RESERVED.

CHAPTER 5. ACCIDENTS, INCIDENTS, AND AERONAUTICAL HAZARDS

SECTION 1. ACCIDENTS AND INCIDENTS

500. GENERAL. When an aircraft is involved in an accident or incident or when a mechanical failure occurs, the circumstances must be promptly reported by the pilot in command as required in this chapter and in accordance with established procedures. The responsibilities of each region and center, the operating elements, and the pilot in command of an aircraft with respect to aircraft accident and incident notification, investigation, and reporting are contained herein and in Order 8020.11.

501. ACCIDENTS.

a. An aircraft accident is an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which any person suffers death or serious injury as a result of being in or upon the aircraft, or anything attached thereto, or the aircraft receives substantial damage.

b. Fatal injury means any injury which results in death within 7 days.

c. Serious injury means any injury which:

(1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received;

(2) Results in a fracture of any bone except simple fractures of fingers, toes, or nose;

(3) Involves lacerations which cause severe hemorrhages, nerve, muscle, or tendon damage;

(4) Involves injury to any internal organ; or

(5) Involves second- or third-degree burns, or any burns affecting more than five percent of the body surface.

d. Substantial damage means damage or structural failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component.

e. Examples which are not considered substantial damage for the purposes of this section are:

(1) Engine failure.

(2) Damage limited to an engine.

(3) Bent fairings or cowlings.

(4) Dented surfaces.

(5) Small punctures in the surface or fabric.

(6) Ground damage to rotor or propeller blades.

(7) Damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips.

f. An aircraft accident shall be reported immediately to the nearest Air Traffic Facility, Flight Standards, General Aviation, or Air Carrier District Office.

502. INCIDENTS.

a. Incident means an aircraft occurrence, not classified as an accident, in which a hazard or potential hazard to safety is involved. Occurrences which have no operational factors involved are handled in accordance with other handbooks and are excluded from the applicability of this order. Such occurrences are reported as Service Difficulty Reports (SDR's), Mechanical Interruption Summaries (MISR's), and Malfunction or Defect Reports (M or D's), and Air Traffic operational errors. For the purpose of notification, investigation, and reporting, the following occurrences must be reported:

(1) In-flight fire.

(2) Rapid decompression requiring emergency action.

(3) Unwanted or asymmetrical thrust reversal.

(4) Flight control system malfunction or failure.

(5) Inability of any required flight crewmember to perform normal flight duties as a result of injury or illness.

(6) Loss of life or serious injury which occurs as a result of personnel presence in or on an aircraft or in direct contact with the aircraft, or with anything attached thereto during ground operations, while the engine is functioning without the intention of flight.

(7) Substantial damage to the aircraft sustained during ground operations with the engine functioning with no intention of flight.

(8) Turbine-engine rotor failure excluding compressor blades and turbine buckets.

(9) Aircraft collision in flight with less than substantial damage and minor or no injuries.

(10) Hazardous material incidents.

(11) Any significant occurrence related to aviation safety. This includes, but is not limited to, threats or acts of sabotage and aircraft hijacking.

(12) In-flight total electrical failures for multiengine aircraft; in-flight total electrical failure for single-engine aircraft while under instrument meteorological conditions.

(13) Near midair collisions.

(14) Gear-up landings or any other collision with the ground or other object, which results in less than substantial damage to the aircraft.

b. An aircraft incident shall be reported to the nearest Air Traffic Facility, Flight Standards District Office (FSDO), General Aviation District Office (GADO), or Air Carrier District Office (ACDO), and in accordance with established local procedures.

c. The listing of reportable incidents in paragraph 502a (1) through (14) is not all inclusive. If doubt exists as to whether an occurrence is reportable, consult the nearest FSDO, GADO, or ACDO.

503. RESPONSIBILITIES OF THE NATIONAL TRANSPORTATION SAFETY BOARD (NTSB). The NTSB is responsible for the investigation of accidents or incidents involving agency aircraft. In some instances, the NTSB may delegate responsibility for investigation to the FAA. AVN will participate in the investigation through the designated FAA accident coordinator, as specified by AVN-1.

504. GROUND ACCIDENTS.

a. An aircraft ground accident is an occurrence resulting in damage to an aircraft in which there is no intent for flight, which costs $100 or more in labor, material, or both to repair.

b. An aircraft ground accident shall be investigated and reported as prescribed in Order 4100.24A.

SECTION 2. AERONAUTICAL HAZARDS

505. AERONAUTICAL HAZARDS AND OTHER OCCURRENCES. Aeronautical hazards are those occurrences or conditions relating to all agency aircraft (including rental) not defined or reported in paragraphs 501 through 504, which result in damage to an aircraft or which could cause an incident, accident, or ground accident, if corrective action is not taken. Of special interest are hazards discovered in one aircraft of a fleet type which could occur in other aircraft of that type. Such hazards should be brought to the attention of all operators of that type as soon as possible. Since the following list of reportable hazards is not intended to be all-inclusive, good judgment must dictate which additional hazards should be reported. Examples of typical aeronautical hazards are:

a. Servicing aircraft with improper fuel.

b. Unscheduled in-flight engine shutdowns.

c. In-flight damage from hail, bird strikes, or turbulence.

d. In-flight failures requiring emergency action.

e. Fires not incident to flight.

f. Ni-Cad battery overtemp failures.

g. Accumulations of smoke or toxic fumes in occupied spaces during flight.

506. REPORTING AERONAUTICAL OCCURRENCES. As soon as practicable following an accident, incident, or aeronautical hazard, the pilot in command or the operating activity shall transmit by telegraph or telephone with telegraphic confirmation all applicable information, using the following message format:

FROM: (Operating Activity).

TO: Aviation Standards National Field Office, AVN-1.

INFO: AVN-40, AVN-100, AVN-300, ACT-600 (ACT aircraft only), Regional Flight Standards Division (Regional Flight Activities).

BT

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SUBJECT: (USE APPLICABLE SUBJECT -- AIRCRAFT ACCIDENT, AIRCRAFT INCIDENT, AIRCRAFT GROUND ACCIDENT, AERONAUTICAL HAZARD).

a. Date and local time of occurrence.

b. Aircraft type, N number, location, and mission. Use mission code listed in appendix 1 of this order.

c. Describe occurrence, failure, or condition. Include weather information if deemed a factor.

d. Part, component, or system involved.

e. Cite any in-flight emergency procedures used.

f. Apparent cause.

g. Corrective action taken or contemplated.

h. Status of aircraft. If out of service, estimated time in service (ETIS).

i. If necessary, request assistance from AVN-6, AVN-100/300, or other federal activity.

507. REPORTING OTHER OCCURRENCES. Any occurrence involving an aircraft which results in damage to non-Government property, may result in a damage claim against the Government, or which may generate unfavorable publicity will be reported promptly to AVN-1, using the format of paragraph 506.

508. HARD LANDINGS AND SEVERE TURBULENCE.

a. Should a hard or overweight landing occur, or should severe turbulence be experienced, the Manager, Aircraft Maintenance and Engineering Division, AVN-300, shall be notified and advice shall be obtained regarding such occurrence prior to the next takeoff.

b. An appropriate entry of the occurrence shall be made in the aircraft logbook. The following information shall be included for those aircraft having flight data recorders:

(1) Date and time of suspected occurrence.

(2) Aircraft heading, altitude, and airspeed.

(3) Flap and/or slat position.

(4) Landing weight.

(5) Fuel load and gross weight.

509. FUEL DUMPING.

a. Pilots planning fuel dumping, under other than emergency conditions, will first contact an air traffic facility and make known their intentions. Air traffic will then advise of a preferred fuel dumping area and discharge altitude. Additionally, air traffic will provide other essential air traffic information to provide separation from other aircraft.

b. In emergency situations, fuel dumping is permissible when such action is essential to continued safe flight.

c. All fuel dumping will be reported in the following format to AVN-300 as soon as practicable after the occurrence:

(1) Reason for fuel dumping.

(2) Approximate geographical area and discharge altitude.

(3) Type of fuel dumped.

(4) Approximate quantity of fuel dumped.

SECTION 3. SECURITY AND ENFORCEMENT ACTION

510. SECURITY OF THE AIRCRAFT AFTER AN ACCIDENT OR INCIDENT. Except as necessary during rescue and firefighting operations, the aircraft shall not be removed or disturbed in any way until released by the NTSB investigator-in-charge, or the

FAA investigator if NTSB does not participate. Unless incapacitated, the pilot in command is responsible for the security of the aircraft until the arrival of the NTSB or FAA investigators. The assistance of local law enforcement officers should be requested for this purpose.

511. ENFORCEMENT ACTION -- PILOTS INVOLVED IN REGULATORY VIOLATIONS.

a. Agency pilots, regardless of certificate privileges or experience, are considered by the public to be professional pilots as well as representatives of the Federal Aviation Administration, and their actions are judged accordingly. For this reason, even minor incidents can reflect adversely on the agency, and improper handling of these situations could create an undesirable public attitude. Each pilot, therefore, must hold to rigid standards. Violations of Federal Aviation Regulations or this order should be identified by management and acted upon consistently and without delay.

b. Enforcement procedures as specified by Order 2150.3, Compliance and Enforcement Program, shall conform to those applicable to similar cases involving other occupational or professional pilots. In addition, the employee is subject to administrative action pursuant to Order 3750.4, Conduct and Discipline Handbook, and the table of suggested penalties contained in appendix 2 of that order.

c. Recommended enforcement action should be coordinated with the Director of the responsible office, and should give consideration to any corrective measures or disciplinary action already taken by the agency.

d. A brief summary of disciplinary, proposed, or completed enforcement action or other corrective action taken for disposition of each occurrence shall be forwarded to the Director, AVN-1. Negative replies are required.

512. ENFORCEMENT ACTION -- PILOTS INVOLVED IN ACCIDENTS/INCIDENTS. Refer to Order 4040.9C, paragraph 711, for enforcement criteria.

513. - 599. RESERVED.

CHAPTER 6. RECORDS AND REPORTS

600. GENERAL. Records of use of aircraft and the carrying of passengers shall be reported and maintained under such procedures as the Director, AVN-1, may prescribe. Additional records and reports may be prescribed by each region or center director.

601. LOGGING OF FLIGHT TIME AND OTHER FLIGHT DATA.

a. Hours of operation determine airframe and component overhaul times. Time between overhaul is increased or decreased when the degree of reliability dictates a change. Other flight data are necessary to establish utilization and other statistics. All flight data must be accurately recorded.

b. Time in service. This time begins when the aircraft leaves the surface of the earth and ends when it touches the earth at the next point of landing. In the event of several full-stop landings, the "time-in-service" shall not include ground taxi time between the initial takeoff and final landing. It shall be accurately recorded by the pilot in command or designated representative on FAA Form 4100-8. When an oleo-actuated elapsed time meter is installed in the aircraft, time recorded thereon shall be utilized in lieu of crew recorded times.

c. Rental time. This time begins and ends according to the terms of the contract, or is based on a recording tachometer. When crew recorded times are stipulated, they shall be accurately recorded to ensure an equitable payment obligation. This time shall not affect "flight time" for the crew involved. Time recorded on Rental Aircraft Expenditure Report (RIS: 4040-11) shall also be "block to block."

d. Flight time. This time begins when the aircraft first moves under its own power for the purpose of flight and ends when it comes to rest at the next point of landing ("block to block" time includes and is usually greater than "time in service") Note: "Time-in-Service" and "Flight Time" shall be accurately recorded on FAA Form 4040-6 by the pilot in command or by his/her designated crewmember.

e. Crew flight time. Enter on FAA Form 4040-6 and credit as follows to ensure compliance with currency requirements of Order 4040.9C, chapter 5.

(1) Pilot in command time shall be credited and logged in accordance with FAR Part 61.

(2) Second in command time shall be credited and logged in accordance with FAR Part 61, and paragraph 504 of Order 4040.9C.

(3) Pilot time shall be credited for time while a pilot is at the flight controls who, regardless of his/her qualifications or position, is actually exercising the aircraft's flight controls (including the time he/she is controlling the autopilot). For any flight, the total pilot time credited to all pilots must equal the flight time for the flight.

(4) Instructor pilot time shall be credited only to designated agency instructor pilots or agency check pilots for each time they are acting in this capacity. The total instructor pilot time credited to all pilots shall not exceed the flight time for the flight. Time credited to the instructor pilot should also be included in pilot in command time in accordance with FAR Part 61.

(5) Flight engineer time shall be credited for flight time during which an individual is functioning as a flight engineer or who, as a designated agency instructor/check flight engineer, is actually conducting either instructional or check flights.

602. PAYMENT FOR RENTAL AIRCRAFT AND SERVICES WITH SF-44.

a. Pilots requiring the use of rental aircraft should obtain a book of SF-44's, Purchase Order-Invoice-Voucher, from AAC-70. Instructions for use of these forms are listed on the cover. The following information shall be added:

(1) Flight hours, listed to the nearest tenth hour, or hundredth hour if required by the lessor.

(2) Aircraft make, model, and registration number.

b. Each region or center may, by contractual agreement, establish procedures for payment of rental hours by use of other than SF-44.

c. The lessor of the rental aircraft will assume responsibility for all expenses incurred in the OPERATION of the aircraft. UNDER NO CIRCUMSTANCES WILL AGENCY RESOURCES SUCH AS FUEL, OIL, OR MAINTENANCE BE UTILIZED ON RENTAL AIRCRAFT UNLESS SPECIFICALLY PROVIDED FOR IN THE FLIGHT HOUR RENTAL AGREEMENT.

d. Except for purchases under the following conditions, no single purchase shall exceed $500:

(1) When an emergency exists and compliance with purchase limitations may result in personal injury or death, property damage, disrupted service of an established operating facility, or would unnecessarily delay the return of an aircraft to flying condition.

(2) When purchasing aviation fuel and oil in accordance with AC 4430.3A, Into-Plane Procurement of Aviation Fuel and Oil.

(3) When renting aircraft in accordance with Order 4040.9C.

(4) When specific advance approval is granted by the Procurement Division, AAC-70.

e. Offices using SF-44's shall submit a copy to the field offices servicing accounting office for recordation of obligation.

f. No single transaction (any single SF-44) shall list purchases that exceed $2,500.

NOTE: For further information regarding use of SF-44's, refer to Order 4040.9C, paragraph 306 and AC 4433.1B, Small Purchase Authority.

g. Fuel and oil purchase.

(1) On itinerary, the pilot in command is responsible to determine availability of military, Defense Supply Agency (DSA) contract, agency contract, or other federal contractual sources of fuel and oil. These sources should be utilized to the maximum practicable extent. Current lists of these fuel and oil contract sources shall be maintained on file at each Flight Operations/Central Aircraft Dispatch. Additional information can be obtained from agency aircraft maintenance bases of Logistics Service procurement offices. Only fuel, oil, and other products that are approved in the appropriate aircraft flight/operations manual or the appropriate maintenance manual shall be used. When higher grade fuel is available at a lower price than lower grade fuel, it shall be used unless the operations manual states otherwise.

(2) Fuel and oil purchased at military or military contract facilities shall be obtained and paid for by utilizing USAF AVGAS Identaplate, military forms, or forms provided by the contractor. A copy of the delivery receipt signed by a crewmember will be forwarded to the agency maintenance facility where the aircraft is based.

(3) Fuel and oil purchased at commercial facilities not having DSA contracts normally will be charged with the use of the U.S. Government National Credit Card assigned to the aircraft. A copy of the delivery receipt signed by a crewmember will be forwarded to the agency maintenance facility where the aircraft is based. Also, subsequent submission to the servicing accounting office is required for recording of receipt information to the uniform accounting system.

603. - 699. RESERVED.

APPENDIX 1. FLIGHT RECORDS

1. PURPOSE. This appendix explains the use of FAA Form 4040-7, Aircraft Crewmember Authorization and Data; FAA Form 4040-2, Pilot/Flight Engineer/Navigator Flight Record and Record of Check Flight; and FAA Form 4040-6, FAA Aircraft Request and Use Record.

2. APPLICATION. This appendix applies to all regions and centers.

3. DISCUSSION. These forms are used to record crew and flight data and to document aircraft requests and use. They also serve as input documents to update the Aircraft Management Information System (AMIS).

4. ACTION. These records shall be processed in accordance with the instructions listed in this appendix. The office having jurisdiction over each flight crewmember and aircraft is responsible to see that these records are prepared in strict conformity to the instructions listed. This will increase the likelihood of accuracy when the data is put into the AMIS data bank.

5. ORDERING INSTRUCTIONS.

a. FAA and DOT Orders. The following orders may be obtained through normal distribution channels:

Order Number	Title
FAA Order 1500.14	Travel
FAA Order 1650.9	Transportation of Hazardous Materials
FAA Order 1800.12D	Flight Standards Program Guidelines
FAA Order 2150.3	Compliance and Enforcement Program
FAA Order 3750.4	Conduct and Discipline Handbook
FAA Order 4040.9C	FAA Aircraft Management Program
FAA Order 4100.24A	General Maintenance Manual
FAA Order 7110.49D	Unlawful Interference - Hijack/Bomb (Threat) Aboard Aircraft - Procedures and Covert Signals
FAA Order 8020.11	Aircraft Accidents and Incidents - Notification, Investigation, and Reporting

b. FAA Advisory Circulars. Advisory circulars may be obtained through normal distribution channels:

Advisory Circular Number	Title
AC 00-46B	Aviation Safety Reporting Program
AC 91-16	Category II Operations - General Aviation Airplanes

c. Forms. Forms are stocked in the FAA Depot and are available through normal supply channels. Use national stock numbers when ordering:

Form Number	Title
FAA Form 4040-2	Pilot/Flight Engineer/Navigator Flight Record and Record of Check Flight NSN 0052-00-041-5002 Unit of Issue - SH
FAA Form 4040-6	FAA Aircraft Request and Use Record NSN 0052-00-865-0001 Unit of Issue - SH
FAA Form 4040-7	Aircraft Crewmember Authorization and Data NSN 0052-00-890-4000 Unit of Issue - SH
FAA Form 4100-8	Aircraft Log Book NSN 0052-00-011-0001 Unit of Issue - EA
AC Form 4100-234	Special Flight Authorization NSN 0052-00-557-4002 Unit of Issue - SH
SF-44	U.S. Government Purchase Order - Invoice - Voucher NSN 7540-01-152-8068 Unit of Issue - BK

6. INSTRUCTIONS FOR PROCESSING FLIGHT RECORDS.

a. FAA Form 4040-7 is filled out, in triplicate, by each person seeking to become an authorized flight crewmember. It is then submitted to the Region/Center Director for his/her signature -- authorizing the member to participate in the flight program. Completion instructions are listed on the form.

After approval, the original is sent to AVN-231 for databank entry. The first copy is retained by the office having jurisdiction over the allocated flight hours. The second copy is retained by either the office having jurisdiction over the flight crewmember, or by the local flight operations activity that is responsible for the flight program -- whichever is most appropriate. See Figure 1 of this appendix for a sample of the form.

b. FAA Form 4040-2 is filled out, in triplicate, by the person requiring a flight check, then submitted to the appropriate approving authority for authorization of the check.

After the approval, the copies will then be submitted to the check pilot/check engineer for further processing. Following the check, the check pilot/check engineer will complete the reverse side of the form, sign it, and send the original to:

(1) The official having jurisdiction over the allocated flight hours, or

(2) The flight operations activity of the affected flight crewmember, as determined by the official listed in (1) above.

The first copy shall be entered in the flight record folder of the crewmember involved. The second copy shall be attached to the accompanying Form 4040-6, and sent to AVN-231 for review/processing.

If the check pilot/check engineer is not an agency employee, the crewmember involved shall process the form as indicated above. Completion instructions are listed on the form. See Figure 2 of this appendix for a sample of the form.

c. FAA Form 4040-6 is filled out by the person requesting administrative approval of the mission, and is used to document the use of agency aircraft, including rental aircraft and flight simulators. Users of aircraft on a full-time basis in accordance with an approved flight schedule need not complete the "Aircraft Request" portion, except that a brief description of the flight mission should be entered under item 4, Justification.

When prior approval for use of an aircraft is required, the person requesting the aircraft will complete ONLY the "Aircraft Request" section of the form and present it to the approving official for review and approval.

Upon completion of the flight(s), passenger, flight, and crew data will be entered by the pilot in command in the "Aircraft Use Record" -- and "Rental Aircraft Data" sections, if appropriate. The completed form will then be returned to the approving office or operating activity, as appropriate. A completed form is required for each day's flight activity for a particular aircraft and crew.

For a multiday itinerary conducted under a single approval, the "Aircraft Request" section need be completed on the first sheet only. If a rental aircraft is used, the "Rental Aircraft Data" for all the flights may be entered on the last sheet.

The approving office, or operating activity, will review the flight data to verify that the mission was made essentially as requested. The reviewing office must ensure that all entries are legible and correct. The form should then be sent forward for data processing in accordance with local procedures. The form shall be retained by the office having jurisdiction over allocated flight hours for a period of 3 years, then destroyed. See Figure 4 of this appendix for a sample of the form.

d. Completion instructions are detailed as follows (see Figure 4):

(1) Block (1) -- Source. Check appropriate square.

(a) FAA -- agency owned or exclusive lease.

(b) Rental -- open market rental aircraft, including simulators.

(2) Block (2) -- Type of Aircraft Desired. Enter the type of aircraft or simulator expected to be used. This can be a specific make and model, or if a rental aircraft or simulator is to be used and make and model are unknown, enter Category I, Category III, or simulator, etc.

(3) Block (3) -- Date(s) Required. Show inclusive dates for multiday itineraries.

(4) Block (4) -- Justification. Explain why the aircraft is being used. List the proposed itinerary, the names/numbers of passengers and crew and estimated flight hours. Refer to Order 4040.9C, paragraphs 222 through 245 for justification entries. Cited paragraphs are acceptable for justification purposes, (e.g., Order 4040.9C, par 232k., Order 4040.9C, par 233a.).

(5) Block (5) -- Requested By. Signature of the person requesting the mission (may be other than the pilot in command). Include the routing symbol and date.

(6) Block (6) -- Approved By. Signature of the person authorized to approve the mission. Include the routing symbol and date. This approval is required PRIOR to the mission, emergencies excepted.

(7) Block (7) -- Type Aircraft. Enter the type of aircraft actually used (BE-200, C-172, etc.). For various administrative reasons, the aircraft actually used may not be the aircraft requested. The approving office should be aware of any aircraft change prior to flight, however.

(8) Block (8) -- Code. Enter the appropriate two-digit code for aircraft type used, followed by the last three digits of the registration number (e.g., 27004 for agency owned BE-200, N4; 9405Z for rental helicopter N5005Z, etc.).

CODES FOR Agency-Owned Aircraft

Aero Commander 680	12	Grumman	71
Sikorsky SK-76	13	L-1329 Lockheed	83
BE-200 Beechcraft	27	NA-265-40 Rockwell Int'l	85
BE-C90 Beechcraft	29	AC-1121 Israel	86
BE-F90 Beechcraft	30	C-500 Cessna	87
B-727 Boeing	33	NA-265-80 Rockwell Int'l	88
CV-580 Convair	42	C-550 Cessna	89
DC-9 McDonnel Douglas	59		

Rental Aircraft Category and Codes

Category I	91 - Single-engine, propeller-driven, one or two place, fixed-wing aircraft.
Category II	92 - Single-engine, propeller-driven, three or more places, fixed-wing aircraft.
Category III	93 - Two-engine, propeller-driven, fixed-wing aircraft of 12,500 pounds or less maximum certificated takeoff weight.
Category IV	94 - Rotary wing aircraft.
Category V	95 - Other aircraft, such as large aircraft, balloons, or gliders.
Category 9A	9A - Simulator, Air Carrier.
Category 9B	9B - Simulator, General Aviation.

(9) Block (9) -- Registration Number. Enter the complete aircraft registration number (e.g., N4, N5005Z).

(10) Block (10) -- User Organization. Enter the appropriate four-digit user organization's accounting cost center code. Obtain this code from the local accounting or program office.

(11) Block (11) -- Region/Center/Office Codes. Enter the appropriate code as shown below:

AC - Aeronautical Center	EU - Europe	SO - Southern
AL - Alaska	GL - Great Lakes	SW - Southwest
CE - Central	NE - New England	WA - Washington
CT - Technical Center	NM - Northwest Montain	VN - Aviation Standards National Field Office
EA - Eastern	WP - Western Pacific	

(12) Block (12) -- Reimbursable Accounting Number. If use of the aircraft is to be paid for by other than the organization having jurisdiction over the aircraft, enter a reimbursable account number which will be furnished by the local accounting or program office.

(13) Block (13) -- Purpose of Flight. Check one block only. The block checked should reflect the justification entry of block 4. Refer to Order 4040.9C, chapter 2, sections 3, 4, and 5 for detailed information about purposes of flight.

(14) Block (14) -- Total Number Passengers. Enter the total number of passengers listed in blocks 4 and 15f.

(15) Block (15) -- Itinerary and Passengers.

(a) Date. Enter the date of flight activity (8/28/85, etc.).

(b) and (c) FROM/TO. List station identifiers (OKC, SWO, DFW, etc.).

(d) Block out/Block In. Enter these times using the 24-hour clock system.

(e) Flight Time. Enter the total block-to-block time, expressed as hours and tenths or hundredths of hours, as appropriate, from block 15d.

Compute tenths as follows:

1 - 2 minutes =	.0 hour	34 - 39 minutes =	.6 hour
3 - 8 minutes =	.1 hour	40 - 45 minutes =	.7 hour
9 - 14 minutes =	.2 hour	46 - 51 minutes =	.8 hour
15 - 20 minutes =	.3 hour	52 - 57 minutes =	.9 hour
21 - 26 minutes =	.4 hour	58 - 62 minutes =	1.0 hour
27 - 33 minutes =	.5 hour		

Compute hundredths as follows: Minutes ÷ 60 = hundredths.

(f) and (g) Name of Passenger(s)/Routing Symbol or Agency. Enter last name and first initial. If the passenger is other than an agency employee, list the organization. If additional space is needed, passengers may be listed on the reverse side or on an attached passenger manifest.

(h) and (i) FROM/TO. Enter station identifier of embarkation and final debarkation point of each passenger.

(j) Total Flight Time. Enter the total of Column e, expressed in hours and tenths or hundredths of hours, as appropriate.

(k) Total Time in Service. Enter this time from the elapsed time meter, expressed in hours and tenths or hundredths of hours, as appropriate. If the aircraft is not equipped with a time meter, record off/on times as required.

1 Crew data.

a Name. Enter names of PIC/SIC and additional crewmembers.

b Number. Enter the current crewmember number (SW035, CE048, etc.)

c and d PIC/SIC. Enter the time logged in accordance with FAR Part 61 and Order 4040.9C.

e Pilot. Enter the time logged as manipulator of the primary flight controls, including "autopilot" time.

f IP. Enter the time logged when acting as an agency designated instructor pilot or check pilot. The total IP time logged should not exceed the flight time of the flight.

g FE. Enter the time logged when functioning as a flight engineer or designated check flight engineer under the provisions of Order 4040.9C.

h WX/Hood. Enter the pilot time logged under actual or simulated instrument flight conditions. Circle the appropriate designation. When both actual and simulated instrument conditions are logged, a note may be added to show the proper breakdown of time.

i Night. Enter the flight time logged by each pilot while manipulating the primary flight controls during the period between the end of evening civil twilight time and the beginning of morning civil twilight time, as published in the American Air Almanac, converted to local time.

j Approaches. Enter the number of instrument approaches completed in each category (precision and nonprecision).

k and l Takeoffs/Landings. Enter the number of takeoffs and landings in the appropriate column, day or night. Night takeoffs and landings shall be logged only when they are made during 1 hour after sunset through 1 hour before sunrise.

(16) Block (16) -- Rental Category. Check the square corresponding to the category aircraft/simulator rented. Refer to "block 8" of paragraph d. for category/simulator coding.

(17) Block (17) Purchase Order Number. Enter SF-44 or blanket purchase agreement number, as applicable.

(18) Block (18) Total Fuel Used. Enter the amount of fuel consumed in gallons and cost (if known) for agency aircraft and dry rentals. For wet rentals, enter the estimated gallons of fuel used.

(19) Block (19) Charges.

a Enter total rental time in hours and tenths or hundredths of hours, as appropriate.

b Enter the rental cost per hour.

c Enter other valid charges, such as tow rates, retrieve rates, etc.

d Enter the total charges of the flight(s).

(20) Block (20) Aircraft Rented From. Enter the name and address of the aircraft/simulator lessor.

a Verified by. Enter the initials of the reviewing official upon completion of the mission.

b Databank Entry. Enter the initials of the person who enters the data from the reviewed form into the AMIS system, or the initials of the person who forwards the data for entry into the system, as locally dictated.

e. FAA Form 4040-6 -- Reverse side. Enter additional passengers from block 15f, and include any pertinent or explanatory remark pertaining to the mission. Signature of the person making the remarks is mandatory.

FIGURE 1. SAMPLE FAA FORM 4040-7, AIRCRAFT PROGRAM CREWMEMBER AUTHORIZATION AND DATA

Aircraft Program Crewmember Authorization & Data

Instructions: This form is to be utilized and processed as required in Order 4040.9 series. Additional instructions are provided below.

1. Date – Date of submission.

2a. Crew Name – Last name, first name, and middle initial of name, not to exceed 20 characters, including spaces.

2b. Position Title – Official title of crew member's position.

3. Crew Number – Assigned crew number. New – new crew number for airmen entering the agency flight program. Delete – to be used only when an airman is leaving the agency flight program. Change from – to be used when an airman transfers to a new area. A change of crew numbers will retain the airman's records for previous year.

4. Cost Center – Assigned cost center. New – new cost center for airmen entering the agency flight program. Delete – to be used only when an airman is leaving the agency flight program. Change from – to be used when an airman transfers from one cost center to another.

5. Last Medical Update – This date should be updated with each medical.

6. Last Physiological – This date should be updated each time training is received.

7. Last Arctic/Survival – This date should be updated each time training is received.

8. Aircraft Type – Use aircraft type codes on bottom of form, or type model and name.

9. Job Category – See job category codes on bottom of form.

10. Last Flight Check – Date of last flight check for type of aircraft entered. (Form 4040-2).

11. Justification – Complete when initially entering the flight program or change in position.

12. Approval – Approving official's signature required when initially entering flight program and revalidated annually thereafter.

13. File original in local program office – Forward copy to AVN-40.

Note: Mark items 5, 6, 7, 8, & 10 NA (not applicable) where appropriate for "other crewmembers"

1. Date: 8-13-84

2a. Name: Lewis, Johnny L. 2b. Position Title: AVN. Safety Insp ☐ Staff ☒ Line

3. Crew No.: FI035 ☒ New ☐ Delete ☐ Change from Crew No.

4. Cost Center: 4830 ☐ New ☐ Delete ☒ Change from Cost Center 4831

5. Last Medical Date: 2/6/84 Medical Class: ① 2 3 6. Last Physiological Training Date: 4-31-83 Medical Restrictions: ☐ Yes ☒ No 7. Last Arctic/Survival Trng. Date: (none)

8. Aircraft Type	9. Job Category	10. Last Flight Check Date
CAT I	P,S,I,C	3-28-82
CAT III	P,S,I,C	6-15-83
CAT IV	P,S,I,C	8-25-84
29	P,S	10-07-81
88	P,S	3-11-80

11. Justification: GS-1825 series, dated 10/73; Agency position No. AC-N658 calls for this participant to engage in proficiency and job performance flying.

12. Approval Signature and Date: George J. Goodland, AVN-1 8/28/84

8. Aircraft Type Codes

Open Market Rental Codes

Category I	91
Category II	92
Category III	93
Category IV	94
Category V	95
Category 9A	9A
Category 9B	9B

Codes for FAA-Owned/Leased Aircraft

Aero Commander 680	12
Sikorsky SK-76	13
BE-200 Beechcraft	27
BE-C90 Beechcraft	29
BE-F90 Beechcraft	30
B-727 Boeing	33
CV-580 Convair	42
DC-9 McDonnel-Douglas	59

Codes for FAA-Owned/Leased Aircraft (continued)

G-159 Grumman	71
L-1329 Lockheed	83
NA-265-40 Rockwell Int'l	85
AC-1121 Israel	86
C-500 Cessna	87
NA-265-80 Rockwell Int'l	88
C-550 Cessna	89

9. Job Category Codes

Pilot-In-Command	(P)
Pilot Second-In-Command	(S)
Flight Engineer	(E)
Instructor Pilot	(I)
Airborne Electronic Technician	(T)
Check Pilot	(C)
Other crewmember	(O)

FAA Form 4040-7 (12-84) (0052-00-890-4000)

FIGURE 2. SAMPLE FAA FORM 4040-2, PILOT/FLIGHT ENGINEER/NAVIGATOR FLIGHT RECORD AND RECORD OF CHECK FLIGHT

PILOT/FLIGHT ENGINEER/NAVIGATOR FLIGHT RECORD AND RECORD OF CHECK FLIGHT

INSTRUCTIONS — This form will be utilized and processed as required in Handbook 4040.9

NAME OF EMPLOYEE TO BE CHECKED (Last, First, M.I.)	ORGANIZATION/LOCATION	DATE OF BIRTH (Mo., Yr.)
Smith, George Q.	FAA, AVN-130	06-13

AIRMAN CERTIFICATES HELD

TYPE	CERTIFICATE NO.
AIRLINE TRANS. PILOT	17923
COMMERCIAL PILOT	
PRIVATE PILOT	
FLIGHT INSTRUCTOR	17923CFII
MECHANIC	952
AIR TRAFFIC CONTROL TOWER OPERATOR	
FLIGHT ENGINEER	
FLIGHT NAVIGATOR	
OTHER (Specify)	
TYPE RATINGS (Specify)	

RATING RECORD

X	SINGLE ENGINE	X LAND	SEA
X	MULTI ENGINE	X LAND	SEA
X	AIRPLANE		AIRFRAME
X	INSTRUMENT		POWER PLANT
	ROTORCRAFT		HELICOPTER
	GLIDER		GYROCOPTER
X	FLIGHT INSTRUCTOR	X AIRPLANE	X INSTRUMENT
	OTHER (Specify)		

AGENCY (FAA) DESIGNATIONS

X	CHECK PILOT
	INSTRUCTOR PILOT
	CHECK FLIGHT ENGR
	INSTRUCTOR FLT. ENGR
	CHECK NAVIGATOR
	INSTRUCTOR NAVIGATOR
	PILOT
	NAVIGATOR
	FLIGHT ENGINEER
	OTHER (Specify)

CURRENT AIRMAN MEDICAL CERTIFICATE HELD

CLASS: ☐ FIRST ☒ SECOND ☐ THIRD

ISSUE DATE: 6-83

PREVIOUS FLIGHT CHECK

TYPE A/C: PA-31

CHECK DATE: 1-83

FLIGHT EXPERIENCE (FAR 61.39, 61.41, 61.47, 63.37, 67.55; Handbook 4040.9)

NOTE—Complete Items 2 through 7 below ONLY if no previous FAA Form 4040-2 is on file at the office administering check flight.

LINE NO	ITEM	HOURS FLT. NAVIGATOR	HOURS FLT. ENGINEER	HOURS PILOT
1	TOTAL FLIGHT TIME			
2	MULTI ENGINE TIME OVER 12,500 LBS.			
3	MULTI ENGINE TIME 12,500 LBS. OR LESS			
4	ROTORCRAFT TIME			
5	TOTAL INSTRUMENT TIME			
6	TOTAL NIGHT TIME			
7	PRINCIPAL AIRCRAFT BY TYPE FLOWN DURING PAST 5-YEAR PERIOD (Limit to 5 entries—combine comparable types)			
	(1)			
	(2)			
	(3)			
	(4)			
	(5)			

On initial Flight check, complete all flight experience items. On subsequent flight checks, only line #1 needs to be completed.

FLIGHT COURSES COMPLETED PAST 12 MONTHS

LOCATION		TYPE AIRCRAFT	LENGTH	COMPLETION DATE
X FAA ACADEMY	OUT OF AGENCY	BE-C90	2 Weeks	4-25-83
FAA ACADEMY	OUT OF AGENCY			

TYPE FLIGHT CHECK REQUIRED

X	PILOT	INITIAL QUALIFICATION	CATEGORY II	TYPE AIRCRAFT
	FLT. ENGINEER	REQUALIFICATION	ACADEMY INSTRUCTOR	C-310
	NAVIGATOR	X PROFICIENCY	AFTER ACCIDENT	
	OTHER (Specify)			

REQUEST DATE	SIGNATURE OF EMPLOYEE TO BE CHECKED	ROUTING SYMBOL/ORG.
9-23-87	George Q Smith	AVN-130

AUTHORIZATION FOR APPLICANT TO BE FLIGHT CHECKED

APPROVAL DATE	SIGNATURE OF APPROVING AUTHORITY	ROUTING SYMBOL/ORG
9-24-87	(Branch or Division Manager ONLY)	AVN-130

FAA Form 4040-2 (1-77)

FIGURE 3. SAMPLE FAA FORM 4040-2, PILOT/FLIGHT ENGINEER/NAVIGATOR FLIGHT RECORD AND RECORD OF CHECK FLIGHT (REVERSE SIDE)

RECORD OF CHECK FLIGHT(S) (Cont'd)

Check Pilots/Flight Engineers/Navigators shall mark only items accomplished, grading each category and item as Satisfactory—S, Unsatisfactory—U, or Not Applicable—NA. Items marked with an asterisk (*) are to be accomplished with reference to instruments only, when appropriate. Entry in Remarks is also required.

PILOT ITEMS

CATEGORY	ITEM	GRADE
A	REGULATIONS AND PUBLICATIONS	S
	1. FLT/OPERATIONS MANUAL	S
	2. FAR'S	S
	3. FLIGHT PLANNING	S
	4. 4040.9	S
	5. WEIGHT AND BALANCE	S
	6. CHECK LIST	S
B	PREFLIGHT	
	1. WALK AROUND INSPECTION	S
	2. EQUIPMENT INSPECTION	S
	3. COCKPIT KNOWLEDGE	S
	4. TAXIING AND ENGINE RUN-UP	S
C	AIRCRAFT SYSTEMS	
	1. POWER PLANT	S
	2. FUEL AND OIL	S
	3. HYDRAULIC AND ELECTRICAL	S
	4. COMM. AND NAV.	S
	5. DE-ICING AND ANTI-ICING	S
	6. FIRE WARNING AND EXT.	S
D	TAKE-OFF	
	1. NORMAL, V1, VR, V2	S
	2. CROSS-WIND	S
	3. SIM. ENGINE FAILURE	S
	4. SIM. ENGINE FAILURE PRIOR V_1	NA
	5. SIM. ENGINE FAILURE AFTER V_1	NA
E	LOCAL AIRWORK	
	1. SLOW FLIGHT *	S
	2. APPROACH TO STALL *	S
	3. STALL RECOVERY *	S
	4. UNUSUAL ATTITUDE *	S
	5. STEEP TURNS *	S

CATEGORY	ITEM	GRADE
F	AIRWORK "ENROUTE"	
	1. AIRSPEED AND ALTITUDE CONTROL *	S
	2. HEADING CONTROL *	S
	3. TRAFFIC CONTROL PROCEDURE *	S
	4. USE OF COMM/NAV. EQUIP *	S
G	EMERGENCIES	
	1. SIM. ENG. FAILURE IN FLIGHT *	S
	2. SIMULATED ENGINE FIRE	S
	3. FEATHERING/UNFEATHERING	S
	4. JET AIRSTART	NA
	5. SIM. CABIN/COMPART. FIRE	NA
	6. S.M. HYDRAULIC FAILURE	NA
	7. SIM. ELECTRICAL FAILURE	S
	8. EMERGENCY DESCENT	S
H	APPROACHES	
	1. HOLDING *	S
	2. VOR ILS ADF PAR ASR, RNAV *	S
	3. MISSED APPROACH *	S
	4. JET PENETRATION *	NA
I	LANDING	
	1. TRAFFIC PATTERN	S
	2. NORMAL	S
	3. SIM. ENGINE OUT	S
	4. CROSS WIND	S
	5. REJECTED LANDING	S
J	KNOWLEDGE OF A/C SURV. EQUIP.	S
K	SMOOTHNESS AND COORDINATION	S
L	JUDGMENT AND TECHNIQUE	S
	1. FLIGHT TIME (*Hours & Tenths*)	1.8
	2. LANDINGS (*Number*)	4

FLIGHT ENGINEER ITEMS

CATEGORY	ITEM	GRADE
A	EQUIPMENT EXAMINATION (*Oral*)	
B	PREFLIGHT INSPECTION	
C	NORMAL OPERATING PROCEDURES	
D	ABNORMAL OPERATING PROCEDURES	
E	PERFORMANCE DATA & CRUISE CONTROL	
F	TROUBLE SHOOTING	
G	EMERGENCY PROCEDURES	
H	FORMS AND RECORDS	
I	POST FLIGHT	
J	CREW COORDINATION	
K	JUDGMENT	
L	FLIGHT TIME: (*Hours & Tenths*)	
M	DATE	

FLIGHT NAVIGATOR ITEMS

CATEGORY	ITEM	GRADE
A	EQUIPMENT EXAMINATION (*Oral*)	
B	EQUIPMENT CHECK	
C	PREFLIGHT PLANNING	
D	NORMAL NAVIGATION PROCEDURES	
E	KNOWLEDGE OF NAVIGATION METHODS	
F	COORDINATION OF NAVIGATION METHODS	
G	EMERGENCY PROCEDURES	
H	COORDINATION OF DUTIES	
I	CREW COORDINATION	
J	JUDGMENT	
K	FLIGHT TIME: DAY/NIGHT	
L	ROUTE OF FLIGHT: FROM / TO	
M	DATE	

APPLICANT HAS BEEN FLIGHT CHECKED AND FOUND QUALIFIED:

- ☐ IN ACCORDANCE WITH PROFICIENCY REQUIREMENTS
- ☐ AS PIC IN COMMAND FOR CATEGORY II OPERATIONS IN ___ TYPE AIRCRAFT
- ☐ AS PILOT IN COMMAND OF AGENCY AIRCRAFT (*Type* ___) FOR IFR/VFR FLIGHT
- ☐ FLIGHT ENGINEER IN ___ TYPE AIRCRAFT
- ☒ AS PILOT IN COMMAND OF CATEGORY III RENTAL AIRCRAFT
- ☐ AS FLIGHT NAVIGATOR
- ☐ OTHER (*Specify*)
- ☐ AS ACADEMY INSTRUCTOR IN TYPE ___ AIRCRAFT
- ☐ NOT QUALIFIED (*Recommend additional time training*)

REMARKS (*Explain each unsatisfactory entry and identify strong and weak points. Attach additional sheets as necessary. ENTRY IS REQUIRED.*)

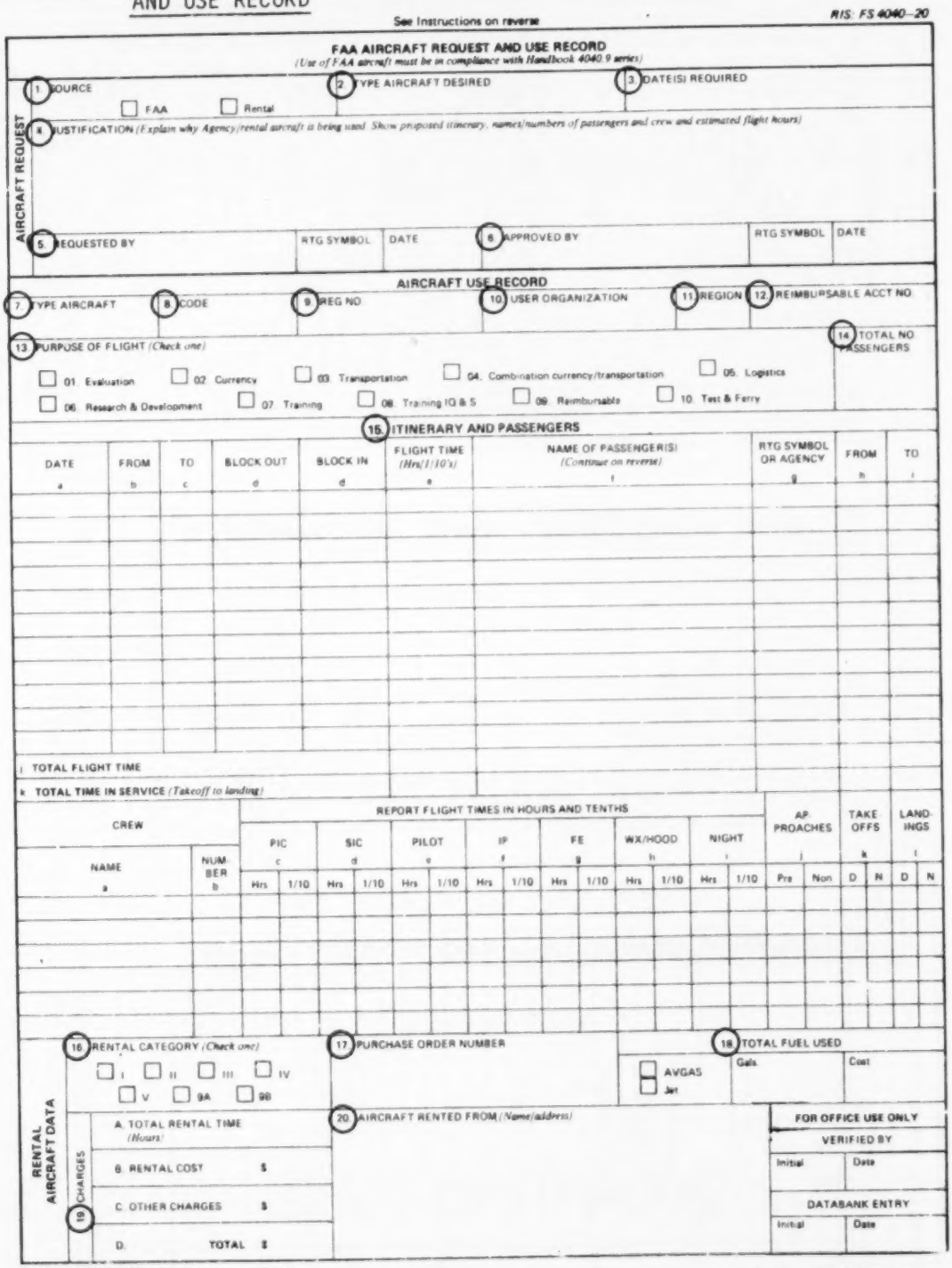
applicant showed excellent performance in smoothness and coordination.

SIGNATURE OF CHECK PILOT/FLIGHT ENGINEER/NAVIGATOR: R. M. Fellwood

AUTHORITY TO ACT IN THIS CAPACITY: AVN-130 Check-pilot | DATE: 6-17-83

☆ U.S.G.P.O. 1980—672-662/22

FIGURE 4. INSTRUCTIONS FOR COMPLETING FAA FORM 4040-6, FAA AIRCRAFT REQUEST AND USE RECORD



See Instructions on reverse

RIS: FS 4040-20

FAA AIRCRAFT REQUEST AND USE RECORD

(Use of FAA aircraft must be in compliance with Handbook 4040.9 series)

AIRCRAFT REQUEST

1 SOURCE ☐ FAA ☐ Rental

2 TYPE AIRCRAFT DESIRED

3 DATE(S) REQUIRED

4 JUSTIFICATION *(Explain why Agency/rental aircraft is being used. Show proposed itinerary, names/numbers of passengers and crew and estimated flight hours)*

5 REQUESTED BY | RTG SYMBOL | DATE

6 APPROVED BY | RTG SYMBOL | DATE

AIRCRAFT USE RECORD

7 TYPE AIRCRAFT | 8 CODE | 9 REG NO | 10 USER ORGANIZATION | 11 REGION | 12 REIMBURSABLE ACCT NO

13 PURPOSE OF FLIGHT *(Check one)*

☐ 01 Evaluation ☐ 02 Currency ☐ 03 Transportation ☐ 04 Combination currency/transportation ☐ 05 Logistics
☐ 06 Research & Development ☐ 07 Training ☐ 08 Training IQ & S ☐ 09 Reimbursable ☐ 10 Test & Ferry

14 TOTAL NO PASSENGERS

15 ITINERARY AND PASSENGERS

DATE a	FROM b	TO c	BLOCK OUT d	BLOCK IN d	FLIGHT TIME *(Hrs/1/10's)* e	NAME OF PASSENGER(S) *(Continue on reverse)* f	RTG SYMBOL OR AGENCY g	FROM h	TO i
j TOTAL FLIGHT TIME									
k TOTAL TIME IN SERVICE *(Takeoff to landing)*									

CREW		REPORT FLIGHT TIMES IN HOURS AND TENTHS														AP PROACHES		TAKE OFFS		LAND-INGS	
		PIC c		SIC d		PILOT e		IP f		FE g		WX/HOOD h		NIGHT i							
NAME a	NUMBER b	Hrs	1/10	Hrs	1/10	Hrs	1/10	Hrs	1/10	Hrs	1/10	Hrs	1/10	Hrs	1/10	Pre j	Non	D k	N	D l	N

RENTAL AIRCRAFT DATA

16 RENTAL CATEGORY *(Check one)*

☐ I ☐ II ☐ III ☐ IV ☐ V ☐ 9A ☐ 9B

17 PURCHASE ORDER NUMBER

18 TOTAL FUEL USED

☐ AVGAS ☐ Jet | Gals. | Cost

19 CHARGES

A. TOTAL RENTAL TIME *(Hours)*

B. RENTAL COST $

C. OTHER CHARGES $

D. TOTAL $

20 AIRCRAFT RENTED FROM *(Name/address)*

FOR OFFICE USE ONLY

VERIFIED BY

Initial | Date

DATABANK ENTRY

Initial | Date

FAA Form 4040-6 (5-80) Supersedes previous editions

AFTER FLIGHT: Return to approving office without delay

*U.S. GOVERNMENT PRINTING OFFICE: 1982-570-251/202

FIGURE 5. SAMPLE FAA FORM 4040-6, FAA AIRCRAFT REQUEST AND USE RECORD

See Instructions on reverse — RIS: FS 4040-20

FAA AIRCRAFT REQUEST AND USE RECORD
(Use of FAA aircraft must be in compliance with Handbook 4040.9 series)

AIRCRAFT REQUEST

1. SOURCE: ☐ FAA ☒ Rental
2. TYPE AIRCRAFT DESIRED: C172
3. DATE(S) REQUIRED: 8-28-85
4. JUSTIFICATION *(Explain why Agency/rental aircraft is being used. Show proposed itinerary, names/numbers of passengers and crew and estimated flight hours)*: Order 4040.9C, Par. 232K - Local AREA - NO passengers
PIC - Clark (FI 033)
SIC - Lewis (FI 035)
EST. 2.0 HRS.
5. REQUESTED BY: Johnny Lewis — RTG SYMBOL: AVN-131 — DATE: 8-27-85
6. APPROVED BY: L. Segundo MAA — RTG SYMBOL: AVN-130 — DATE: 8-27-85

AIRCRAFT USE RECORD

7. TYPE AIRCRAFT	8. CODE	9. REG NO.	10. USER ORGANIZATION	11. REGION	12. REIMBURSABLE ACCT NO.
C182	92135	N87135	4830	AC	

13. PURPOSE OF FLIGHT *(Check one)*: ☒ 01. Evaluation ☐ 02. Currency ☐ 03. Transportation ☐ 04. Combination currency/transportation ☐ 05. Logistics ☐ 06. Research & Development ☐ 07. Training ☐ 08. Training IO & S ☐ 09. Reimbursable ☐ 10. Test & Ferry
14. TOTAL NO. PASSENGERS: 0

15. ITINERARY AND PASSENGERS

DATE	FROM (b)	TO (c)	BLOCK OUT (d)	BLOCK IN (d)	FLIGHT TIME (Hrs/1/10's) (e)	NAME OF PASSENGER(S) (Continue on reverse)	RTG SYMBOL OR AGENCY (g)	FROM (h)	TO (i)
8/23/85	OKC	SWO	0830	0945	1.3				
8/23/85	SWO	OKC	1015	1130	1.3				
j. TOTAL FLIGHT TIME					2.6				
k. TOTAL TIME IN SERVICE *(Takeoff to landing)*					2.3				

REPORT FLIGHT TIMES IN HOURS AND TENTHS

CREW NAME (a)	NUMBER (b)	PIC (c) Hrs	PIC 1/10	SIC (d) Hrs	SIC 1/10	PILOT (e) Hrs	PILOT 1/10	IP (f) Hrs	IP 1/10	FE (g) Hrs	FE 1/10	WX HOOD (h) Hrs	WX HOOD 1/10	NIGHT (i) Hrs	NIGHT 1/10	AP PROACHES (j) Pre	AP PROACHES Non	TAKE OFFS (k) D	TAKE OFFS N	LAND INGS (l) D	LAND INGS N
P. Clark FI	033	2	6			1	2					0	7				1	1		1	
J. Lewis FI	035			2	6	1	4					0	5			1		2		2	

RENTAL AIRCRAFT DATA

16. RENTAL CATEGORY *(Check one)*: ☐ I ☒ II ☐ III ☐ IV ☐ V ☐ 9A ☐ 9B
17. PURCHASE ORDER NUMBER: N/A
18. TOTAL FUEL USED: ☒ AVGAS ☐ Jet — Gals. EST. 46.0 Gals. — Cost Wet rental
19. CHARGES:
A. TOTAL RENTAL TIME (Hours): 2.3
B. RENTAL COST: $90.00
C. OTHER CHARGES: $
D. TOTAL: $207.00
20. AIRCRAFT RENTED FROM *(Name/address)*: Epitome Aircraft, Inc.
Okla. City, OK

FOR OFFICE USE ONLY
VERIFIED BY — Initial: CE — Date: 8/29/85
DATABANK ENTRY — Initial: LL — Date: 9/30/85

FAA Form 4040-6 (5-80) Supersedes previous editions

*U.S. GOVERNMENT PRINTING OFFICE: 1982-570-251/202

AFTER FLIGHT: Return to approving office without delay

FIGURE 6. SAMPLE FAA FORM 4040-6, FAA AIRCRAFT REQUEST AND USE RECORD (REVERSE SIDE)

INSTRUCTIONS

This form supersedes previous editions of FAA Form 4040-6 which will no longer be used. Following are abbreviated instructions for its use. Complete instructions are included in Notice 4040. and will be included in Appendix II of Handbook 4040.9A.

1. The person requesting the use of an agency aircraft, including rental aircraft, and simulators, will complete the AIRCRAFT REQUEST portion and submit form to approving authority. Pilot will enter flight, crew, and rental data and return form to approving office or operating activity upon completion of flight.

2. Approving office or operating activity will verify flight data against initial request.

3. Form will be retained for 90 days by office having jurisdiction over allocated flight hours and then destroyed.

4. Most entries are self-explanatory. These are the few exceptions —

   USER ORGANIZATION — Enter accounting cost center code from Handbook 1370.4.

   REIMBURSABLE ACCOUNT NUMBER — If use of aircraft is to be paid for by other than the organization having jurisdiction over the aircraft, obtain code from local accounting or program office.

   AIRCRAFT CODE — Enter two (2) digit code for aircraft type of rental category followed by last three (3) digits of registration number (e.g. 34005 for C421, "N5").

   CREW NUMBER — Assigned crew numbers must be entered for all crewmembers logging flight time.

ADDITIONAL PASSENGERS

REMARKS

Government transportation to the rental site not available. POV authorized.

D. Blitz

APPENDIX 2. EXEMPTION

NATIONAL AVIATION FACILITIES EXPERIMENTAL CENTER

Exemption No. 1200

UNITED STATES OF AMERICA
FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
WASHINGTON, D. C.

In the matter of the request of

NATIONAL AVIATION FACILITIES EXPERIMENTAL CENTER

for relief from the provisions FARs 91.70(a), 91.71(d), 91.79(c), and 91.109(a)

Regulatory Docket No. 10633

GRANT OF EXEMPTION

On 12 and 25 August 1970 the Federal Aviation Administration's National Aviation Facilities Experimental Center (NAFEC) requested authority to deviate from the provisions of Sections 91.70(a), 91.71(d), 91.79(c), and 91.109(a) of the Federal Aviation Regulations (FAR).

These FAR's prescribe respectively: a maximum speed of 250 knots for aircraft operated below 10,000 MSL; that acrobatic flight shall not be conducted below an altitude of 1,500 feet above the surface; a minimum altitude over other than congested areas of 500 feet above the surface, except over open water or sparsely populated areas. In that case, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure; and the altitudes to be maintained by aircraft operating under VFR below 18,000 feet MSL while in level cruising flight at or above 3,000 feet above the surface.

Under the Federal Aviation Act of 1958, the FAA has been assigned a mission which in part is the research and development of systems, procedures, facilities, and devices to meet the needs for safe and efficient navigation and traffic control. Consistent with this mission, certain flight operations must be conducted contrary to one or more of the General Operating and Flight Rules specified above.

The request of the Director, NAFEC has been carefully considered and it has been determined that the request for deviation from certain regulations by flight operations in support of research and development projects is adequately justified.

In consideration of the foregoing, I find that granting this exemption is in the public interest. Therefore, pursuant to the authority contained in Section 307(e) of the Federal Aviation Act of 1958, the National Aviation Facilities Experimental Center of the FAA is hereby granted an exemption from the provisions of FAR 91.70(a), 91.71(d), 91.79(c), and 91.109(a) to the extent necessary to conduct flight operations in support of research and development projects, provided that operations contrary to FAR 91.70(a) and 91.109(a) shall:

1. Use a competent observer, in addition to the pilot and copilot;

2. Be able to get traffic advisory service from ATC; and

3. Not be conducted in flight visibility conditions of less than 5 miles.

This exemption is effective on the date of issuance indicated below, and shall remain in effect until superseded or rescinded by the Federal Aviation Administration.

Original Signed By
WILLIAM M. FLENER
Director, Air Traffic Services

Issued in Washington, D.C. on 15 October 70

APPENDIX 3. RESERVED FOR REGION AND CENTER SUPPLEMENTS

*U.S. GOVERNMENT PRINTING OFFICE : 1986 0-491-810/2067